



S201 Catalog of Far-Ultraviolet Object

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Spectrograph (Experiment S201) operated from 21 to Apollo-16 mission. These images were scanned on a mi magnetic tapes. A set of seven computer programs were	icrodensitometer, and the output recorded on e written to process these recorded outputs in
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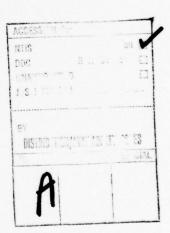


20. ABSTRACT (Continued)

field center coordinates. The errors in position of the detected images are less than about 3 arc-min. Correlations are given with star numbers in the Smithsonian Astrophysical Observatory catalog. Values are given of the peak density and the density volume (a product of the number of pixels in the image and the density units above background in each pixel). The text includes a discussion of the photometry, corrections thereto due to threshold and saturation effects, and its comparison with theoretical expectation, stellar model atmospheres, and a generálized far-ultraviolet interstellar extinction law. The S201 catalog is also available on a single reel of seven-track magnetic tape.

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THE S201 CATALOG OF FAR-ULTRAVIOLET OBJECTS

INTRODUCTION

The Naval Research Laboratory's Far-Ultraviolet Camera/Spectrograph (Experiment S201) was operated from 21 April to 23 April 1972 on the lunar surface during the Apollo-16 mission. A primary objective of this experiment was to obtain far-ultraviolet images and spectra of stars, nebulas, and extragalactic objects against the low sky background seen from the lunar surface. Figure 1 is a photograph of a training model of the instrument, illustrating its external features. The instrument was based on an electrographic Schmidt camera (Fig. 2). Further details of the instrument are given in Ref. 1.

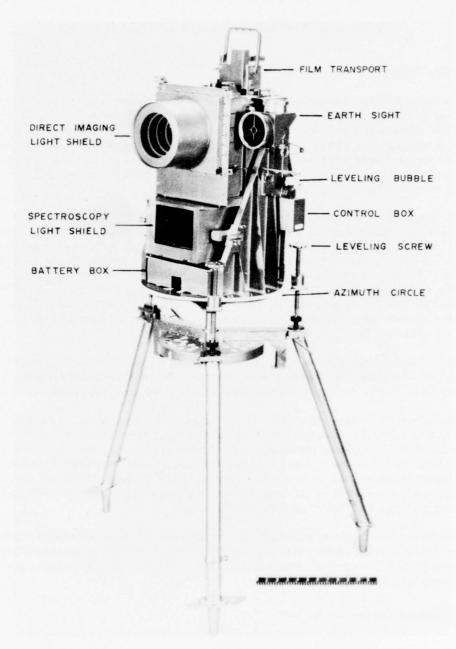
The direct-imagery frames from the S201 camera covered 20° -diameter circular fields of view and had limiting resolution of about 2 arc-min at field center, degrading to about 4 arc-min near the edges. Exposures of 1, 3, and 10 min were taken with a LiF corrector on the electrographic Schmidt camera (designated ILi exposures, wavelength range 1050 to 1600 Å), followed by exposures of 3, 10, and 30 min with a CaF_2 corrector (designated ICa exposures, wavelength range 1250 to 1600 Å). Figure 3 shows as a function of wavelength the overall detection efficiency of the camera in these two modes of operation. In some cases the sequence was cut short, with the result that the last exposure was less than the maximum of 10 min for ILi or 30 min for ICa.

The ILi exposures include a diffuse background due to interplanetary Lyman- α emission [2]. This background produced a rather high fog level on the 3-min ILi exposures and made nearly all 10-min ILi exposures unusable due to saturation of the emulsion.

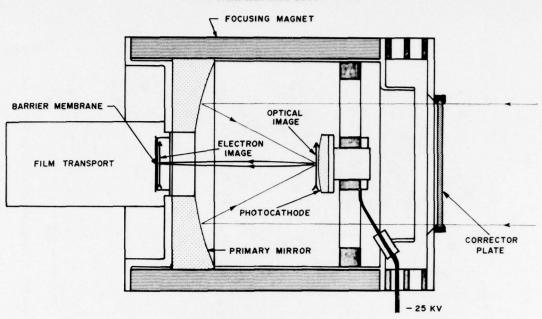
The camera was pointed at ten preselected target fields (Figs. 4a, 5a, ..., 13a) during the 48 hr it was deployed, and it obtained 185 photos and spectra. These included fields of view in and out of the galactic plane, allowing a sampling of both galactic and extragalactic objects. Both the target selection and the observing time on each were largely constrained by the mission time-line, the location of the landing site (9°00'S, 15°31'E), and the position of the camera in the shadow of the lunar module. Negative prints of the best direct-imagery frames for each target are shown in Figs. 4b, 5b, ..., 13b.

Preliminary results of experiment S201 were given in Ref. 4; other published papers have given details of the imagery and spectrography of the terrestrial upper atmosphere and geocorona [2, 5, 6], imagery of nebulosities in Cygnus [7], and imagery and spectrography of the Large Magellanic Cloud [8-10].

Manuscript submitted September 23, 1977.



 $Fig.\ 1-Training\ model\ of\ the\ NRL\ far-ultraviolet\ camera/spectrograph$



 ${\bf Fig.~2-Diagram~of~electrographic~Schmidt~camera, illustrating~operating~principle}\\$

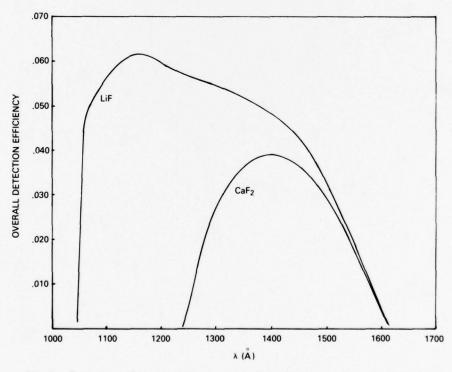


Fig. 3 — Detection efficiency of the camera in direct imaging mode, with a LiF corrector and a $\rm CaF_2$ corrector

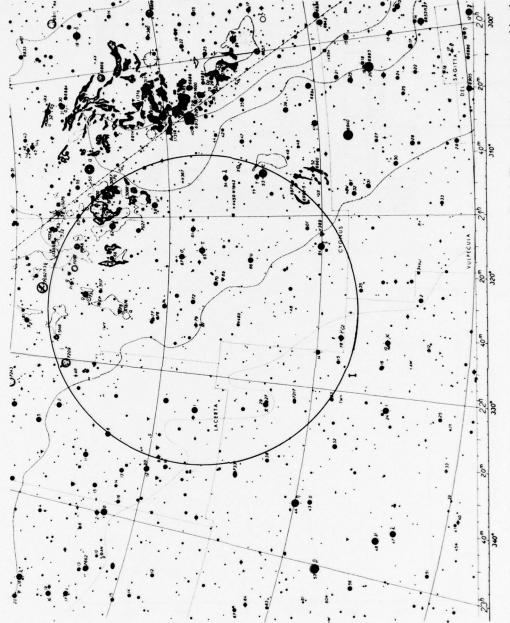


Fig. 4a — Preselected target field (Cygnus). Figures 4a, 5a, ..., 13a are adapted from Ref. 3. The approximate area covered by the S201 pointing is shown by the circle.

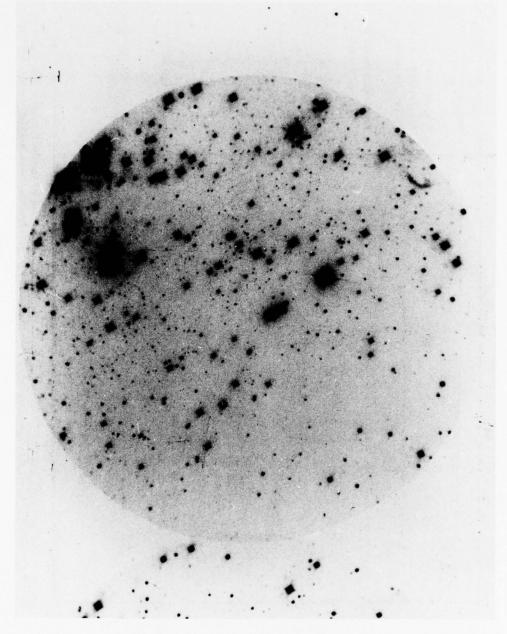


Fig. 4b - S201 starfield photograph (frame A27, ICa, exposure time 10-min)

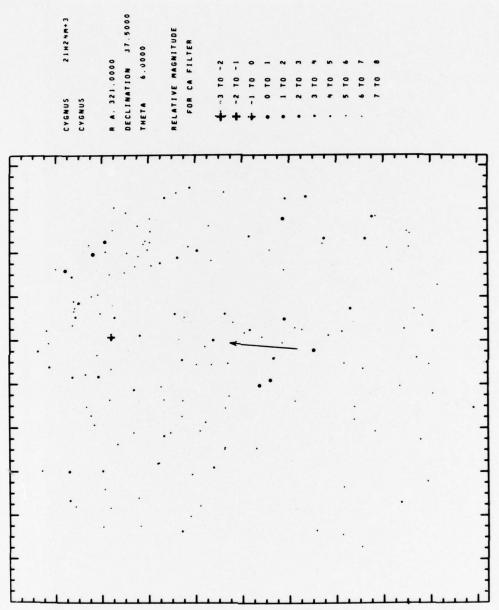


Fig. 4c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 4b. North direction is indicated by arrow. Relative magnitudes are computed from SAO spectral classes and S201 camera response as explained in the text.

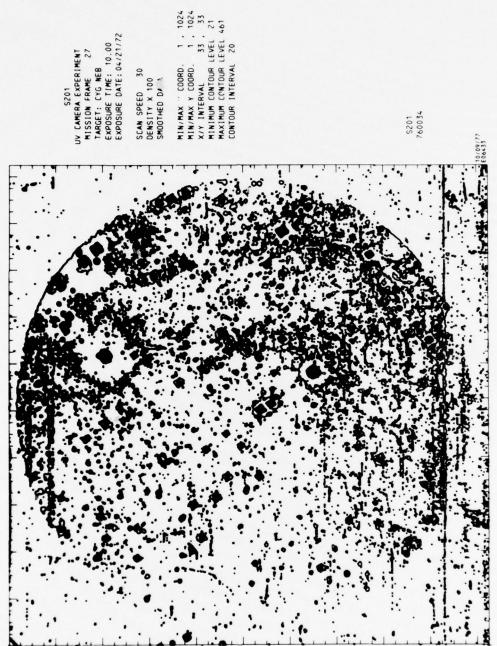
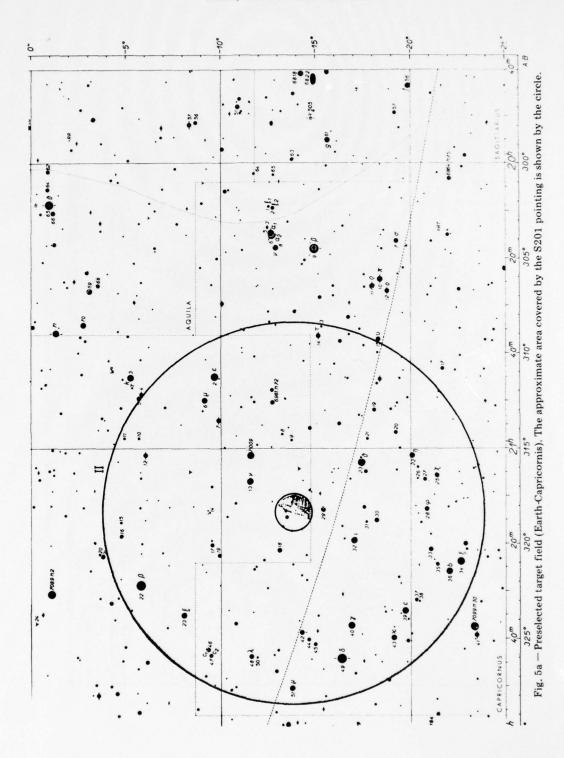


Fig. 4d — Sample isodensity contour plot. Orientation is the same as in Figs. 4b and 4c.



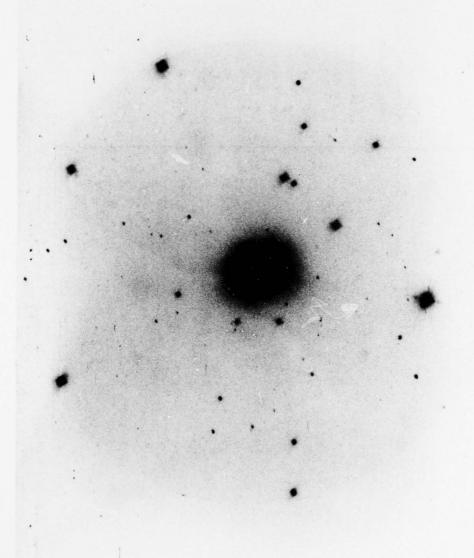
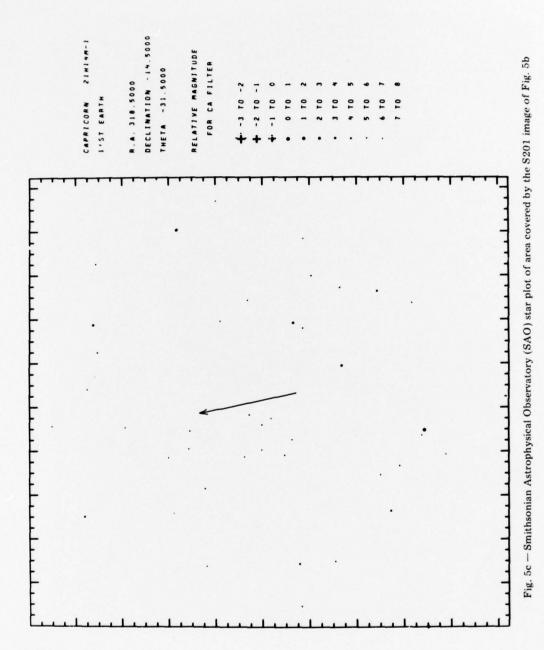


Fig. 5b - S201 starfield photograph (frame A45, ICa, 10-min exposure)



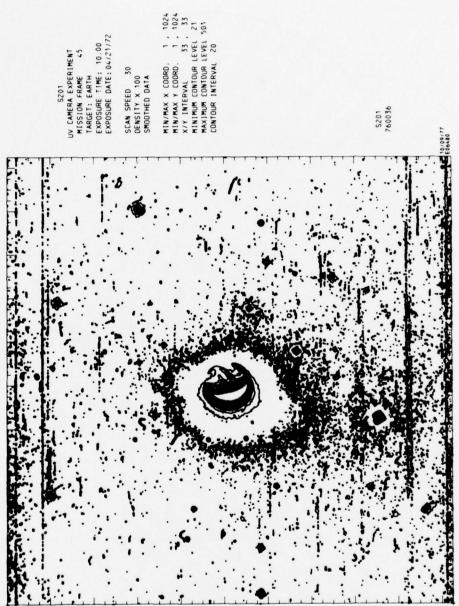


Fig. 5d - Sample isodensity contour plot. Orientation is the same as in Figs. 5b and 5c.

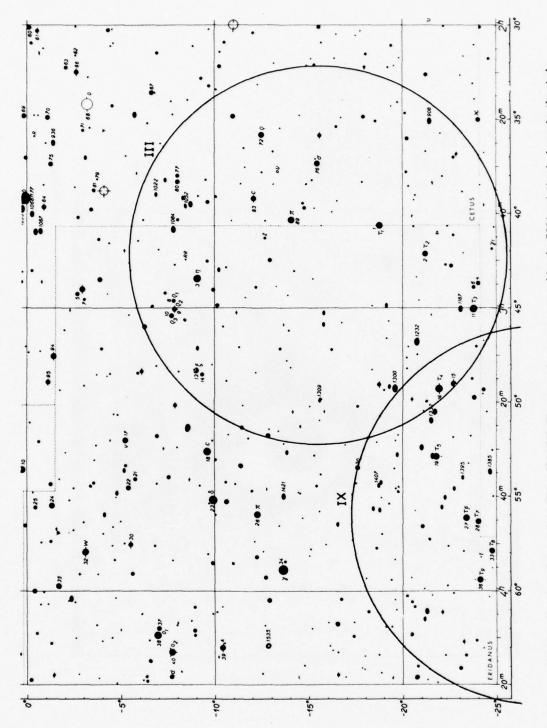


Fig. 6a - Preselected target field (Cetus-N 1068). The approximate area covered by the S201 pointing is shown by the circle.

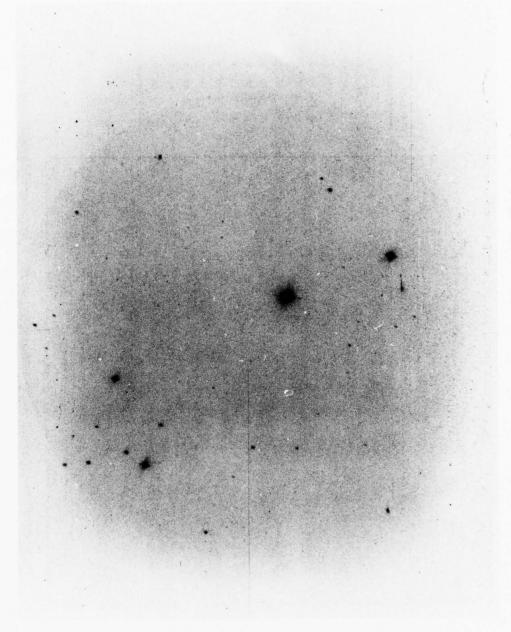
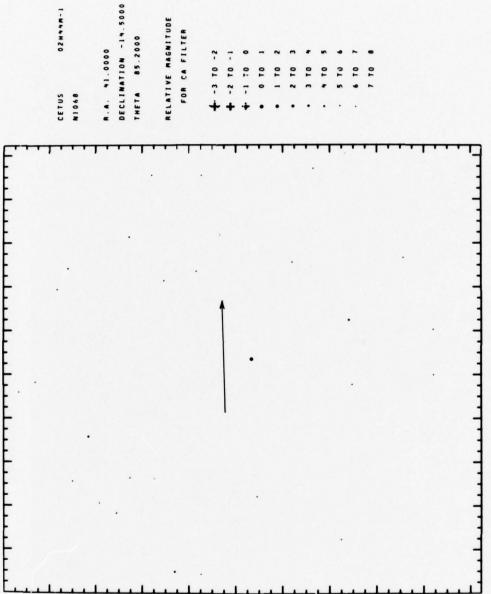


Fig. 6b - S201 starfield photograph (frame A63, ICa, 10-min exposure)



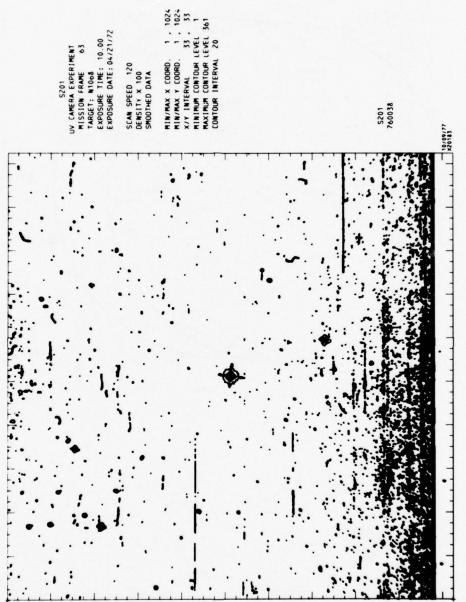


Fig. 6d - Sample isodensity contour plot. Orientation is the same as in Figs. 6b and 6c.

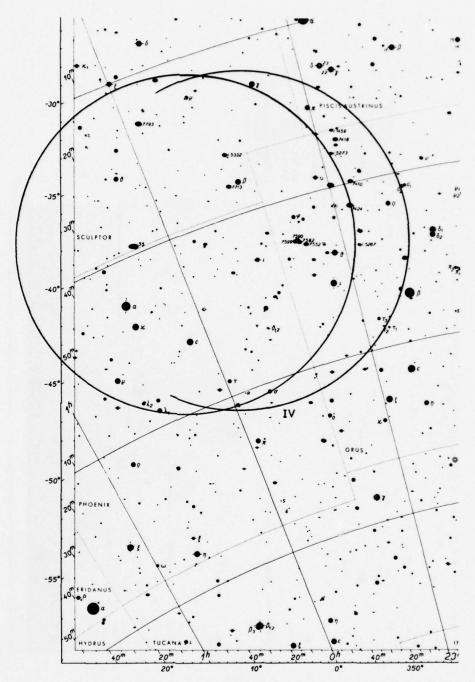


Fig. 7a — Preselected target field (Grus-N55). Two overlapping fields shown. The approximate area covered by the S201 pointing is shown by the two circles (beginning and ending of sequence).

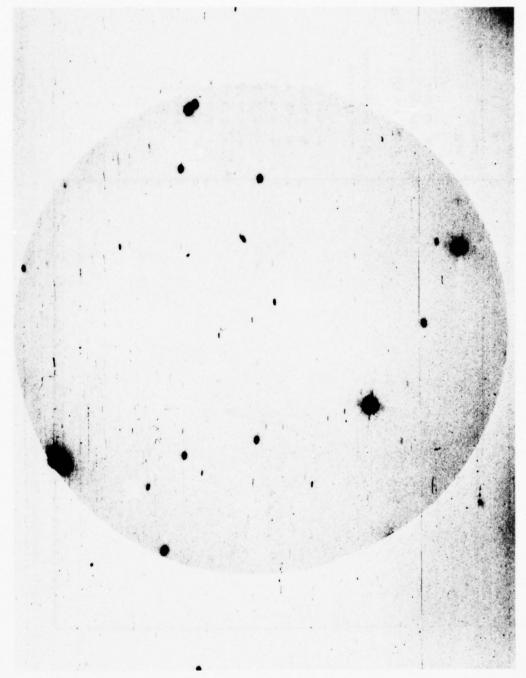
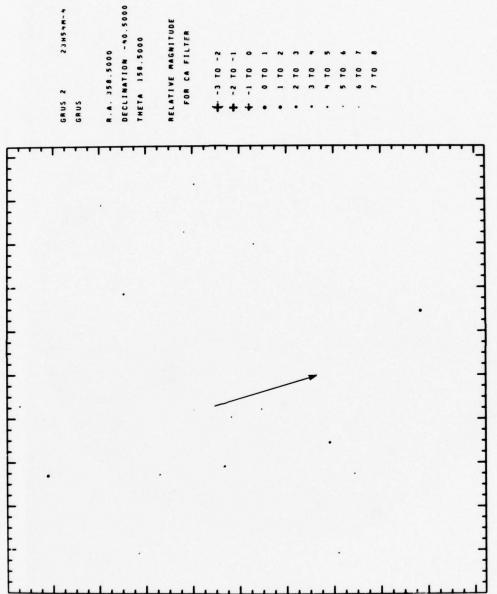


Fig. 7b - S201 starfield photograph (frame A94, ICa, 30-min exposure)



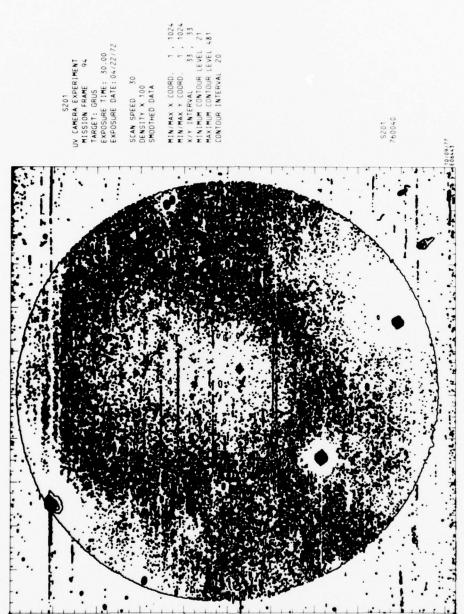
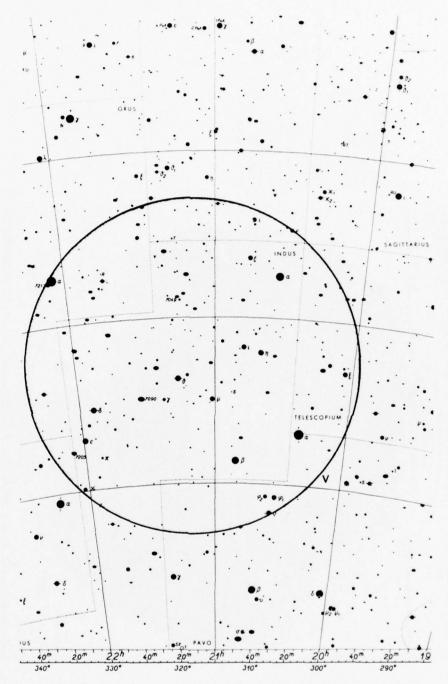


Fig. 7d - Sample isodensity contour plot. Orientation is the same as in Fig. 7b and 7c.



 $\label{eq:Fig. 8a-Preselected} Fig.~8a-Preselected~target~field~(Pavo).~The~approximate~area~covered~by~the~S201~pointing~is~shown~by~the~circle.$

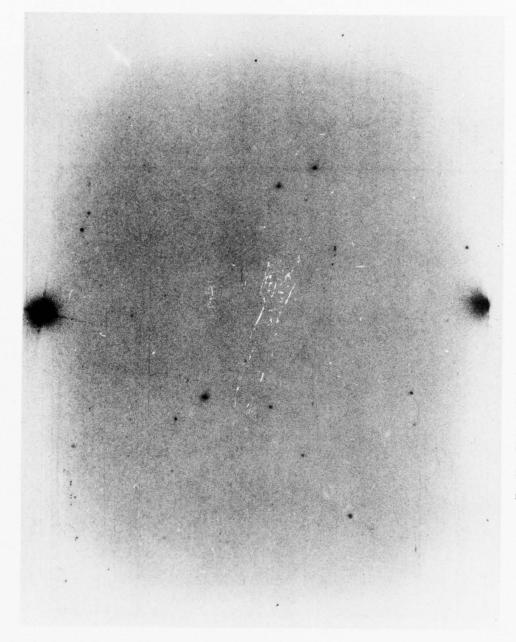


Fig. 8b - S201 starfield photograph (frame A121, ICa, 3-min exposure)

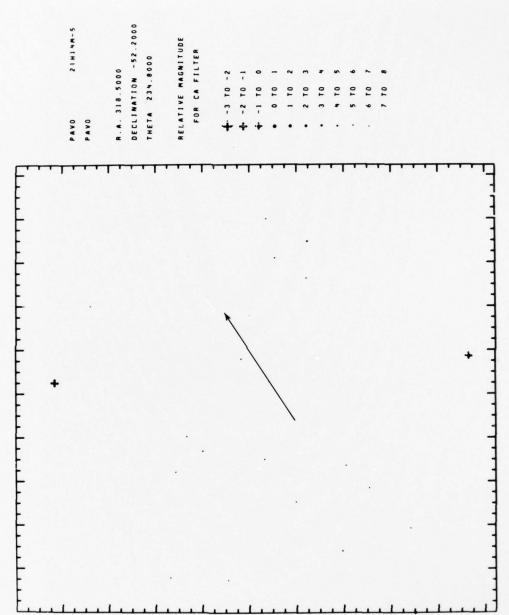


Fig. 8c — Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 8b

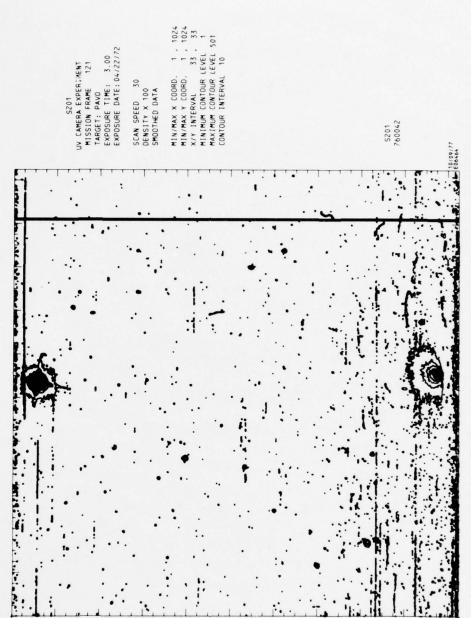
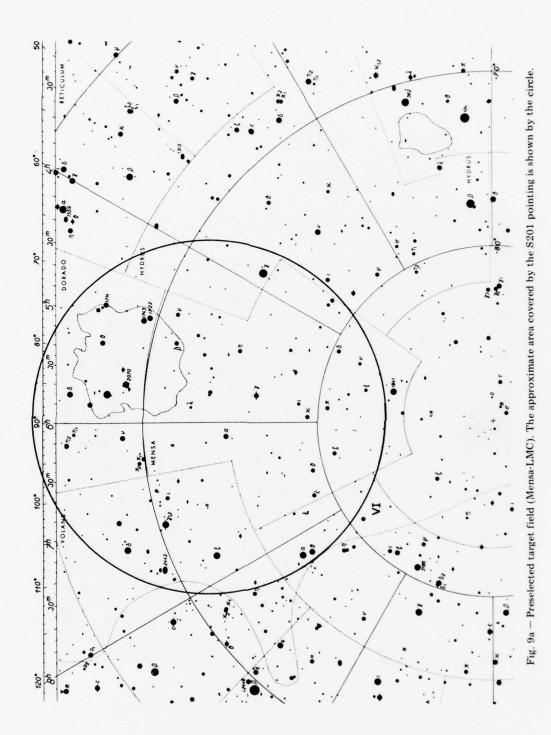


Fig. 8d — Sample isodensity contour plot. Orientation is the same as in Figs. 8b and 8c.



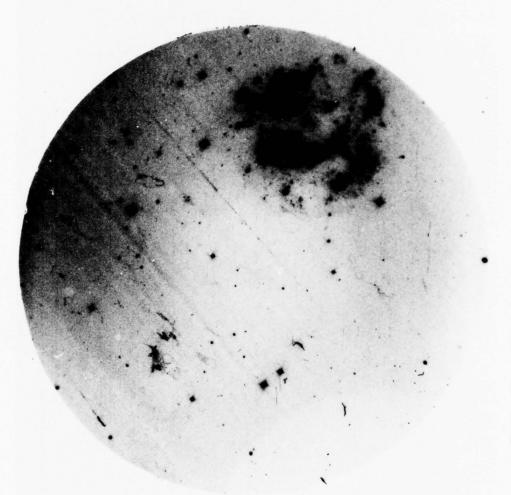
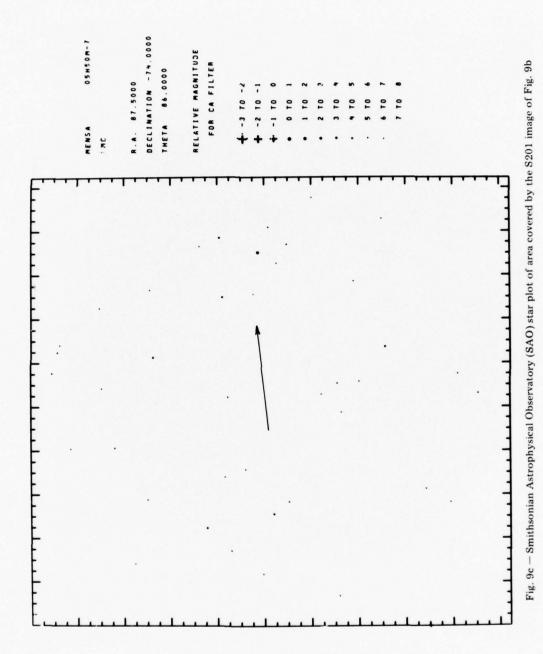


Fig. 9b - S201 starfield photograph (frame A129, ICa, 10-min exposure)



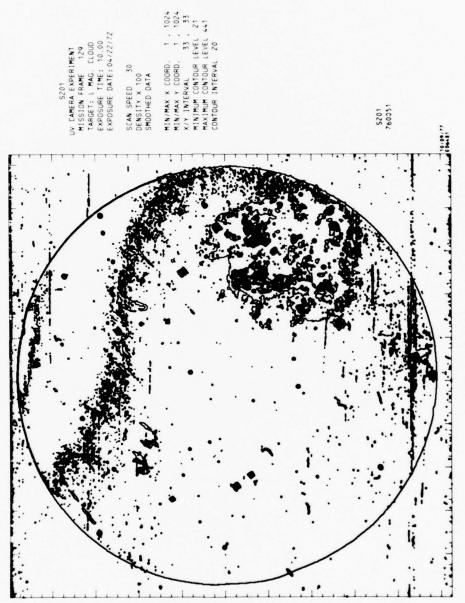


Fig. 9d — Sample isodensity contour plot. Orientation is the same as in Figs. 9b and 9c.

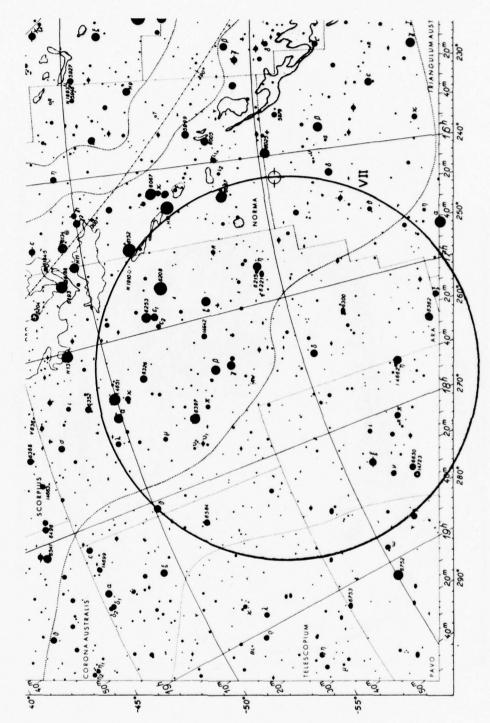


Fig. 10a - Preselected target field (Norma-N6300). The approximate area covered by the S201 pointing is shown by the circle.

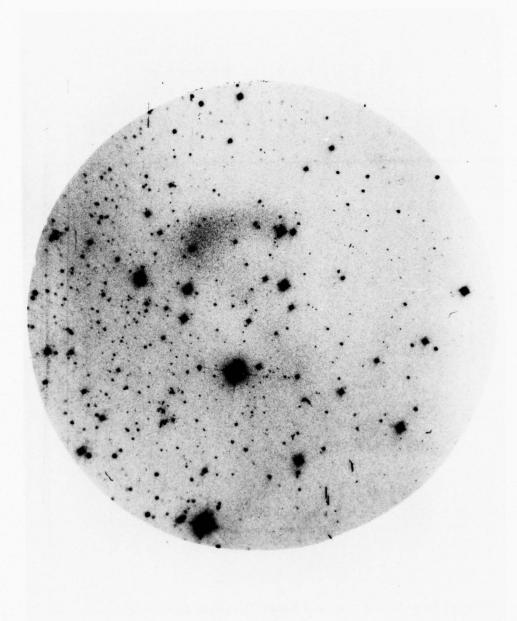
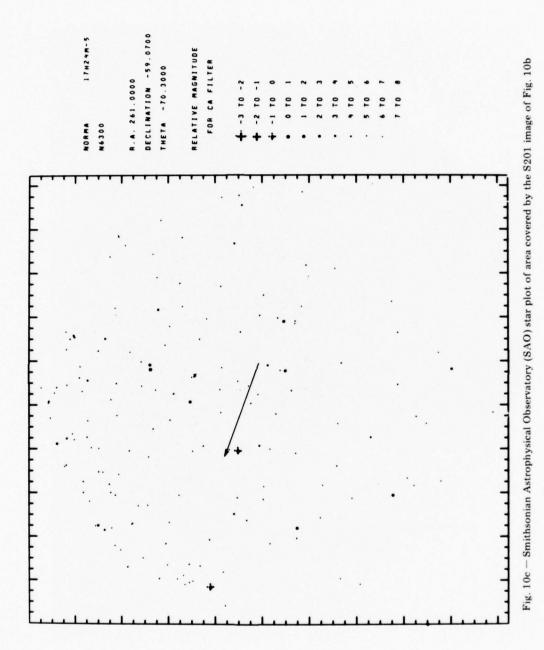


Fig. 10b - S201 starfield photograph (frame A149, 4.1-min exposure)



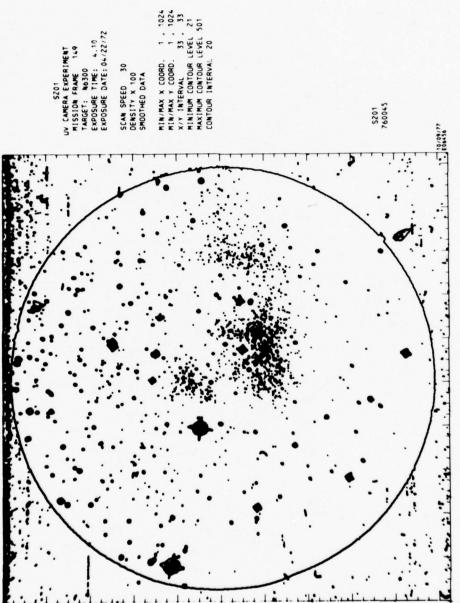
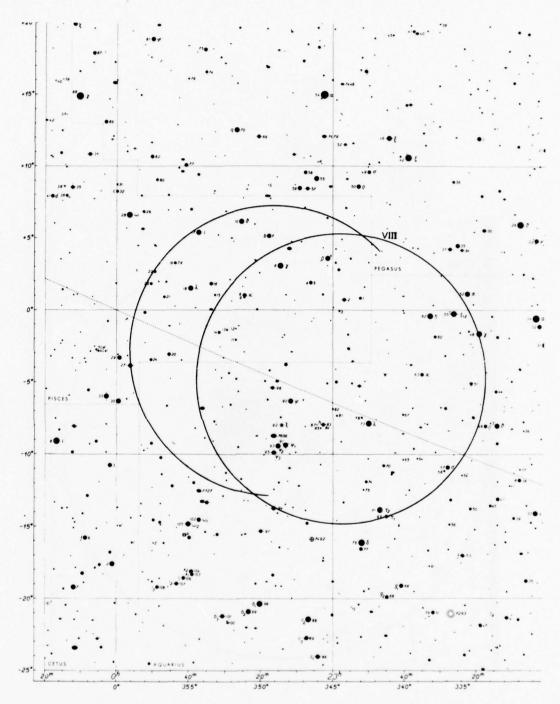


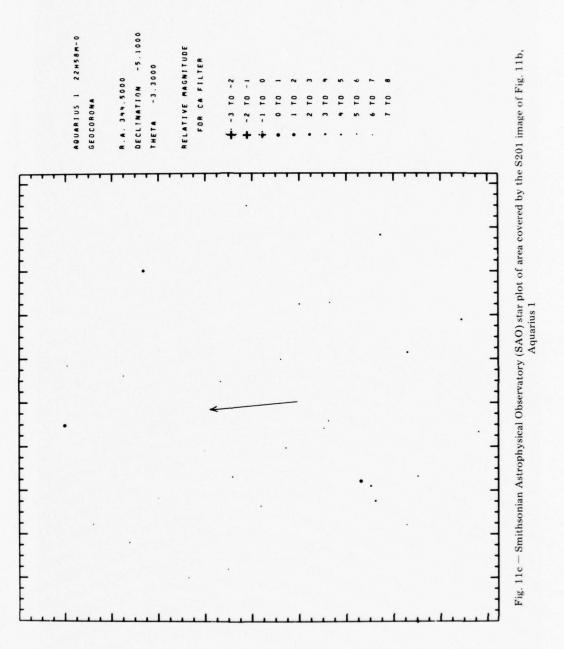
Fig. 10d - Sample isodensity contour plot. Orientation is the same as in Figs. 10b and 10c.



 $\label{eq:Fig.11a-Preselected} Fig.~11a-Preselected~target~field~(Aquarius-Geocorona).~Two~overlapping~fields~are~shown.~The~approximate~area~covered~by~the~S201~pointing~is~shown~by~the~two~circles~(beginning~and~ending~of~sequence).$



Fig. 11b - S201 starfield photograph (Aquarius 1, frame A156, ICa, 10-min exposure)



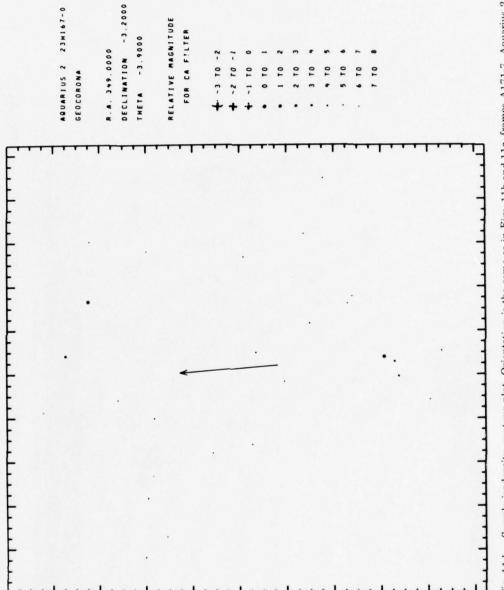
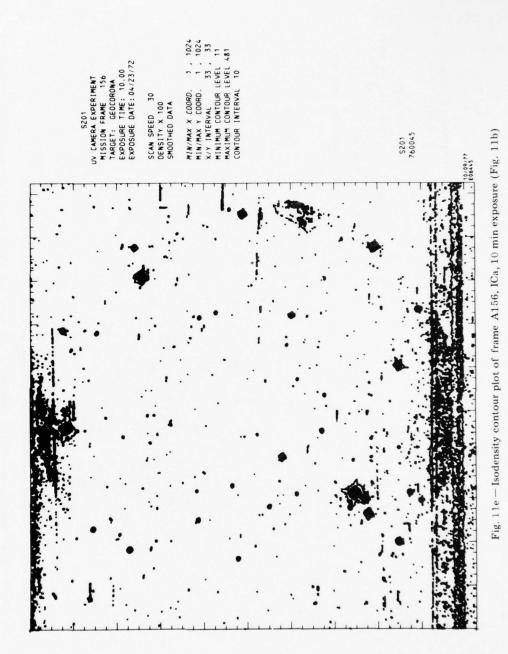


Fig. 11d - Sample isodensity contour plot. Orientation is the same as in Figs. 11b and 11c, frames A171-7, Aquarius 2



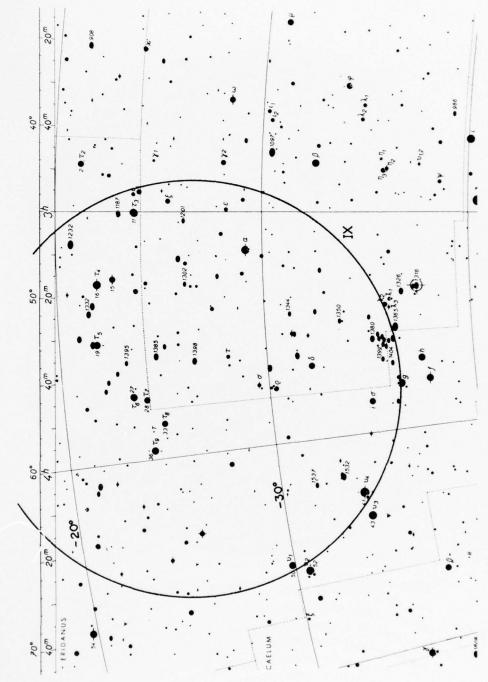
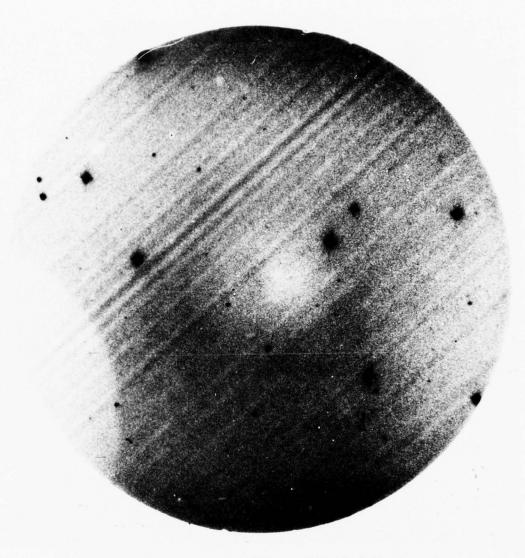


Fig. 12a - Preselected target field (Fornax). The approximate area covered by the S201 pointing is shown by the circle; see also Fig. 6a.



 ${\rm Fig.~12b-S201~starfield~photograph~(frame~A192,~ICa,~3\text{-}min~exposure)}$

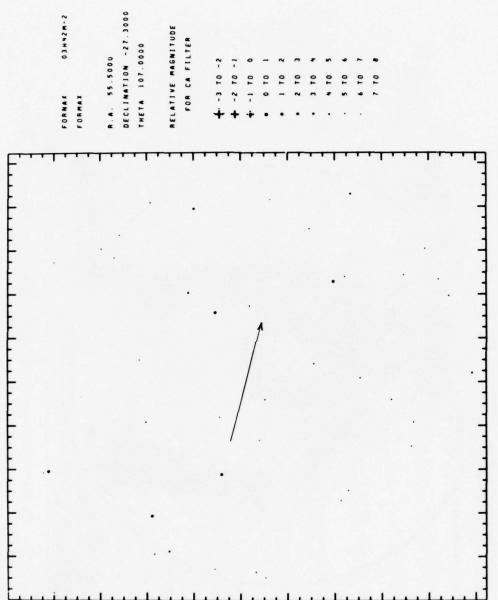


Fig. 12c - Smithsonian Astrophysical Observatory (SAO) star plot of area covered by the S201 image of Fig. 12b

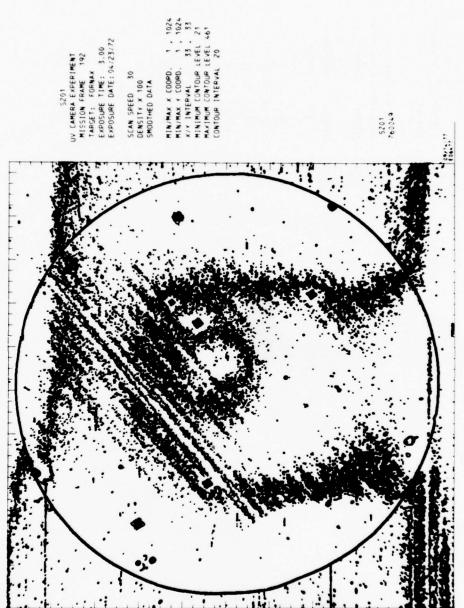
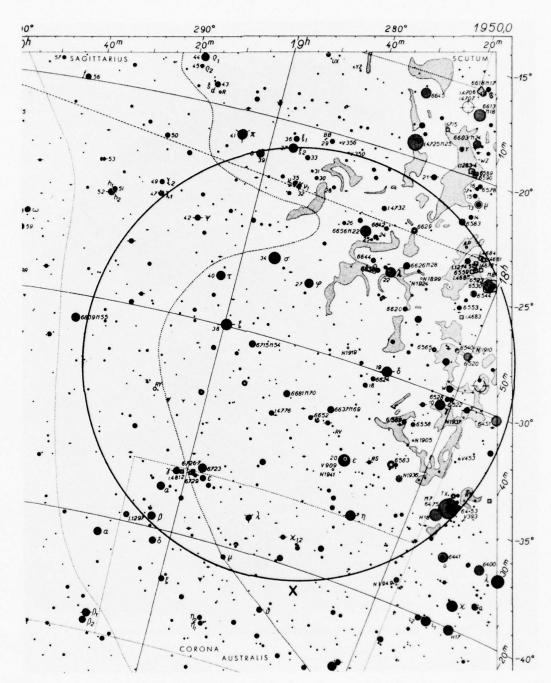
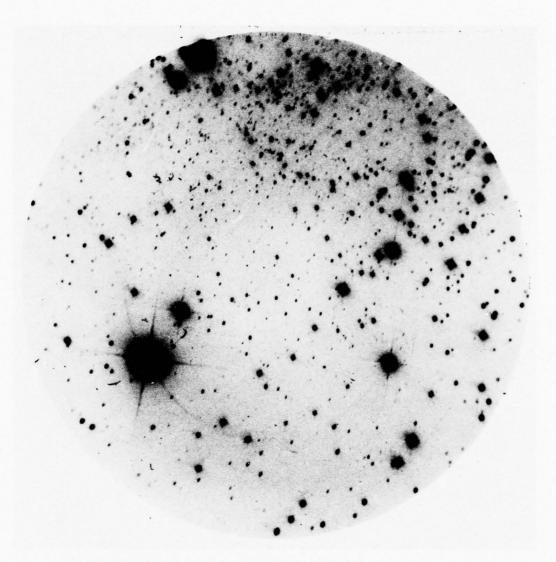


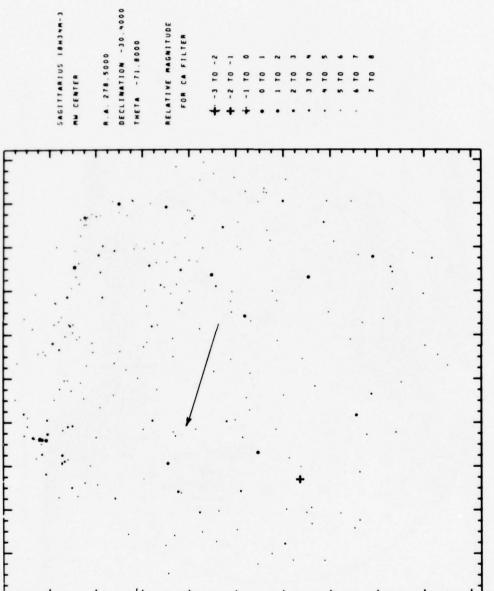
Fig. 12d — Sample isodensity contour plot. Orientation is the same as in Figs. 12b and 12c



 $\label{eq:Fig.13a-Preselected target field (Sagittarius-MW Center). The approximate area covered by the S201 pointing is shown by the circle.}$



 $Fig.\ 13b-S201\ starfield\ photograph (frame\ A203,\ ICa,\ 10\text{-min\ exposure})$



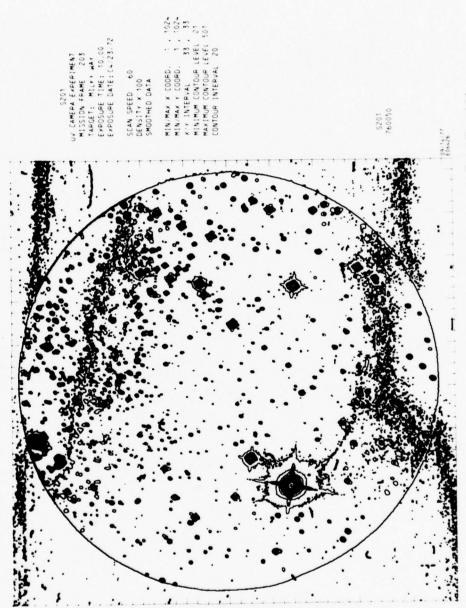


Fig. 13d — Sample isodensity contour plot. Orientation is the same as in Figs. 13b and 13c.

DATA ANALYSIS

All 204 frames, including, for example, calibration on frames A1 to A19, stellar imagery on frames A21 to A28, and spectra on frames A48 to A56, were scanned with a PDS microdensitometer in South Pasadena, Calif., specially tuned by its Boller and Chivens manufacturers to cover the range 0 to 5.2 density. The output (optical density $D = \log (I_0/I)$ was recorded on 27 seven track magnetic tapes at 800 bits/inch and with odd parity. These data, after reformatting on new tapes, were deposited with the National Space Science Data Center, Code 601, NASA Goddard Space Flight Center, Greenbelt, MD 20771, on 16 reels numbered D23995 to D24010 inclusive.

The scan matrix was 1024 by 1024 rasters ($1024^2 x$, y points, or pixels) on all scans except calibration frames, and one raster was 33 μ m, corresponding to 1.19 arc-min in the sky. The densitometer spot was 40 μ m square. The x direction was parallel to the film edge toward the tail end of the film, which was loaded emulsion up, and the y direction was across the film at 90° clockwise from x (a left-hand coordinate system). Scan speeds of 17.2, 8.6, and 4.3 mm/s were used, requiring 1/2, 1, or 2 hr per frame. The speed was selected according to eye estimates of the density gradients on each frame (lowest speed for high density gradients). A speed test was undertaken for four star images on frames A191 and A192 and showed that the PDS recording lag [11] reduced the measured peak density in a star image, although the position of the image was unaffected because of the zigzag scan (+x, then -x).

The center of each scan (x = 512, $y \approx 512$) was placed as nearly as possible at the frame center. The PDS density readings (in units of 0.01D) were checked by scanning standard step wedges at the beginning and end, together with the calibration frames. No zero-point drift of the PDS microdensitometer was detected in the 19 days of scanning (29 July to 16 August 1974). There were one to seven parity errors on 19 of the frame scans, and one bad tape was discovered by playback; the scans were repeated. The PDS recorded densities in units of 0.01D (100 log I_0/I), and these units are used throughout this catalog.

An asset of the electrographic recording technique is that the optical density of the processed emulsion is directly proportional to integrated photon flux up to densities of about 1.5D, and the relationship between density and exposure can be determined to densities over 3.5D. Preflight laboratory calibrations of the S201 instrument's spectral response and absolute sensitivity were used to determine the ultraviolet brightnesses of observed diffuse sources and point sources (star images). Observations of the hydrogen geocoronal and interplanetary Lyman- α emissions [2] are consistent with other measures of these emissions, and hence tend to confirm the preflight calibrations.

Star images were detected, located, and identified by a series of EXEC II programs on the Univac 1108 computer at the NASA Johnson Space Center. Seven major programs were written and can be summarized as follows:

• The REFORMAT program added a header starting with the frame number and added an end-of-file mark to each PDS scan, creating a new tape compatible with the EXEC II system.

• The SMOOTH program was found necessary to reduce grain noise in the PDS output. It created a new data tape by averaging 12 surrounding pixels with each pixel in the scan, using the following weighting factors to give a smoothed density D(x, y) at each point x, y:

- The CONTOUR program plotted isodensity contours at selectable contour intervals over selectable regions of the scan. This was used primarily to give quantitative intensity distributions over extended far-ultraviolet objects such as the geocorona, possible clouds in the solar wind, nebulas, clouds in the Large Magellanic Cloud (LMC), other galaxies, and clusters of galaxies. Sample full-frame plots are shown in Figs. 4d, 5d, ..., 13d. These contour plots also revealed defects in the scan data, such as hairs and scratches, which were later removed from the list of star images. They show streaks (as in Fig. 12d) caused by inhomogenieties in the barrier membrane, a lenticular region of low cathode sensitivity in the low-x, high-y part of each frame, and small variations in the background density (B) due to vignetting. Small-region (enlarged) contour plots were used to check density-volumes derived from the STAR DETECTION program.
- The STAR DETECTION program identified each starlike image by its "edge" 20 units (0.2D) above local background, measured its "area" by the number N of pixels within the edge, added up the total density $\Sigma_N D$, and measured the peak density P, the x, y coordinates of the peak, and the local background B. From these measurements the density volume of the image $V = \Sigma_N (D B)$ can be derived. This program is described in detail in Appendix A.
- The STAR PLOT program was based on a tape created from the SAO catalog tape provided by the Smithsonian Astrophysical Observatory, Cambridge, MA 02138. That catalog, dated 1966, lists 258,997 stars as faint as 10.5 visual magnitude (complete to approximately 9 magnitude) in all parts of the sky, together with spectral type, visual magnitude m_v , photographic magnitude m_p , right ascension α , declination δ , (the latter two being 1950 coordinates), proper motions, and references. A new tape "SAO CATALOG APOLLO" was created, listing all SAO stars of O, B, and A types, F stars brighter than 4.5 visual magnitude and other types brighter than 3.5 visual magnitude in regions covering the ten $\mathrm{S}201$ target fields listed in Table 1. From this tape the STAR PLOT program created plots and list lists of the SAO stars in fields accurately matching the S201 fields and using symbols that roughly represent far-ultraviolet magnitudes, as shown in Figs. 4c, 5c, ..., 13c. These rough far-ultraviolet magnitudes were computed using blackbody curves for the effective temperatures appropriate to the spectral classes and integrating the fluxes over the range $1050 ext{-}$ 1600 Å for the ILi frames and over the range 1250-1600 Å for the ICa frames. These plots were used to identify three to 23 star images on each frame with the brighter SAO stars. (A previous step had been the identification of three to five bright O-B stars by visual inspection and comparison with the Skalnate-Pleso charts (Figs. 4a, 5a, ..., 13a).) It was later found necessary to introduce a "distortion correction" (Δx and Δy as a function of x, y) to eliminate an S-shaped distortion produced by a nonuniform magnetic field in the S201 camera. This involved plots of detected images and plotted positions of over 150 SAO stars in two fields (Cygnus and Sagittarius), plots of resulting Δx and Δy , and smoothing the Δx , Δy matrix.

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- The COORDINATE TRANSFORMATION program used the input of three or more identified star positions $(x, y \text{ and } \alpha, \delta)$ and the distortion matrix to convert all detected star positions on one frame from scan coordinates to celestial (1950) coordinates right ascension (α) and declination (δ) . The program derives the center-of-frame coordinates α_0 , δ_0 and the angle θ_0 between the -y axis and the + δ axis (direction north) from the input positions by the method of least squares. The residuals for each input star were printed out and used to spot an occasional misidentified input star. The root-mean-square residuals in x and y were used to estimate position errors, typically within 3 arc-min. In Table 1, σ is the larger of the rms residuals in rasters.
- The STAR IDENTIFICATION program was used to compare the coordinates of detected starlike images on each frame with SAO star coordinates on the SAO CATALOG APOLLO tape and print out a separate line for each star image and the SAO stars within 10 arc-min of that image position. These printouts, in the format of the final S201 catalog, were then edited, eliminating scan defects and correcting background (B) values inconsistent with the contour plots. The editing was done with the EXEC VIII Univac 1110 computer; a query (?) was added to doubtful SAO numbers, background values, and density-volume values, and H or L was added to density-volume values considered too high or too low (i.e. a factor of 2 above or below the mean) for the SAO spectral type and visual magnitude. The symbol NO (for non-SAO object) was inserted in the SAO-number column when two or more S201 frames recorded an image with no SAO star within 10 arc-min. They are listed in Table 2.

The measured density volumes (V) require three corrections: at low V a quantity T must be added to correct for truncation of the images at 20 units (0.2D) above background B, a correction $\Delta\Delta$ must be added for the PDS lag during the rise from B to the peak density P, and for V > 500 a quantity ΔD must be added to correct for the nonlinear response of the S201-camera-and-NTB-3-emulsion combination.

Figure 14 illustrates schematically the truncation correction T for images of different sizes. Many cross sections were drawn from mosaics of the smoothed scan data. The images were found to be nearly circular, roughly approximated by a right circular cone of volume (N/3)(P-B). At $V \le 400$ the full image radius was 3.5 rasters, and the measured V was 20N plus a rounded cap somewhat larger than a cone of volume (N/3)(P-B-20), as shown in Fig. 14a. This excess of cap over a cone is called $\Delta V = V - 20N - (N/3)(P-B-20)$, and it was found that, on the average, $\Delta V = 0.13N(P-B-20)$ for $80 \le V \le 800$, and $\Delta V = 100$ for $800 \le V \le 3000$. Then for the faint images the truncation correction is

$$T = \frac{\pi}{3} (3.5)^2 (P - B) - (N/3)(P - B - 20) - 20N, \quad \text{for } V \le 400,$$

and is relatively large (up to a factor of 3.6 at V = 80). (Images with N < 4, or V < 80, are not listed in the catalog, because most of them are noise.)

Measured values of V, N, and P – B for 138 images on frames A26, A27, and A28 (ICa, low background) also show how images "grow" from V = 80 to V over 100,000 (in units of 0.01D times raster squared, where 1 raster = 33 μ m). There is some scatter, but most of the values fall within 20% of the mean curves of N vs V and (P - B) vs V (values from these curves being listed in the first three columns of Table 3).

Table 1 - Apollo Frames Scanned and Measured

In this table, α_0 and δ_0 are coordinates of the scan center, at x=512, y=512 rasters, θ_0 is the position angle of the -y scan axis projected on the sky; "Stand. Stars" is the number of α , δ and x, y inputs to the COORDINATE TRANSFORMATION program; σ is the larger of the rms x residuals or y residuals, given in rasters, "No. of Images" is the number of starlike images of four or more pixels located by the STAR DETECTION program; "BG Range" is the range of the background density (B) in units of 0.01D; "SAO Stars" is the number of star images within 5 arc-min of stars listed in the Smithsonian Astrophysical Observatory catalog (1966); and "Non-SAO Objects" (NOs) is the number of starlike images detected on two or more frames which are more than 10 arc-min from any star in the SAO catalog). Except for the three entries footnoted, the local background B was the average of five surrounding pixels (as explained in Appendix A).

Frame	Exp	Filter	α_0 (deg)	δ_0 (deg)	θ_0 (deg)	Stand. Stars	σ	No. of Images	BG Range	SAO Stars	Non-SAC Objects
					Cygnus (le	oop nebu	la)				
A21	1/4	Li	320.97	+37.57	+05.97	19	1.7	51	22- 30	32	0
22	1	Li	321.15	+37.47	+06.09	23	1.9	124	60- 70	103	1
23	3	Li	321.03	+37.51	+06.22	22	1.9	257	104-143	182	7
26	3	Ca	319.66	+37.58	+04.94	23	2.4	216	14- 20	166	3
27	10	Ca	321.12	+37.42	+05.68	23	2.0	456	18- 30	336	8
28	3.7	Ca	321.20	+37.55	+05.86	23	2.0	284	15- 28	212	7
				C	apricorn (e	arth cent	tered)				libraria.
A40	1	Li	318.73	-14.43	-31.33	6	1.9	27	75-292	17	0
41	3	Li	318.71	-14.36	-31.40	8	1.9	30	158-348	19	0
44	3	Ca	318.49	-14.47	-31.46	12	1.8	36	17- 25	29	1
45	10	Ca	318.34	-14.70	-31.69	12	2.2	40	17- 28	31	4
46	30	Ca	318.59	-14.63	-31.80	12	2.1	43	12- 30	32	3
					Cetus (for	NGC10	68)				
A58	1	Li	41.76	-15.26	+85.41	3	0.4	6	33- 40	3	1
59	3	Li	41.79	-15.24	+85.10	5	3.2	15	68- 83	9	2
62	3	Ca	40.57	-14.09	+85.19	5	2.3	17	12- 17	7	1
63	10	Ca	40.54	-14.09	+85.21	6	2.5	24	15- 20	11	3
64	8.4	Ca	41.69	-14.03	+85.47	5	1.9	21	17- 24	13	3
					Grus (fo	r NGC55	5)				
A68	1	Li	353.12	-42.61	+153.87	6	2.7	10	48- 63	7	0
69	3	Li	353.20	-42.64	+153.97	8	1.4	15	102-128	9	1
72	3	Ca	354.53	-42.09	+152.71	8	1.8	18	13- 19	9	1
73	10	Ca	353.81	-42.43	+153.38	8	1.5	20	15- 23	11	1
88	1	Li	358.11	-40.73	+153.59	3	3.3	8	43- 59	3	1
92	3	Ca	358.40	-40.58	+153.47	6	2.4	22	10- 22	9	1
93	10	Ca	358.70	-40.38	+153.36	6	2.3	20	16- 26	10	2
94	30	Ca	358.48	-40.50	+153.91	6	2.0	29	17- 27	10	2

Table continues.

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Table 1- Apollo Frames Scanned and Measured (Concluded)

Pavo	rame	Exp	Filter	α_0 (deg)	$\frac{\delta_0}{(\text{deg})}$	θ_0 (deg)	Stand. Stars	σ	No. of Images	BG Range	SAO Stars	Non-SAC Objects
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						P	avo					
121 3 Ca 318.86 -52.27 +234.79 10 1.8 32 14-28 12	117	1	Li	318.55	-52.23	+234.76	9	2.7	22	47- 62	9	0
121 3 Ca 318.86 -52.27 +234.79 10 1.8 32 14-28 12	118	3	Li	318.51	-52.16	+235.02	10	3.0	27	106-136	11	1
A124				- management	2011	THE RESIDENCE OF THE PARTY OF T		00000	170.00			1
125						Mensa (LM	IC includ	led)				
125	124	1	Li	87.44	-74.00	+85.86	10	1.4	67	57- 90	16	13
129												23
Norma (for NGC6300) A144					De l'Anna de la constante de l							51
A144			10000	2000						2.8 4.9 3		54
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						Norma (fo	r NGC63	300)				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	144	1	Li	260.80	-59.06	-70.30	15	1.5	127	70-100	88	7
148 3 Ca 261.13 -59.06 -70.42 15 1.5 220 20-28 159 197 Aquarius (geocorona) Aquarius (geocorona) A150 1/2 Li 344.26 -05.16 -03.40 5 1.5 8 30-49 7 151 1 Li 344.27 -05.06 -03.29 10 1.4 15 47-77 13 152 3 Li 344.30 -05.05 -03.40 11 1.4 27 130-380 22 155 3 Ca 344.29 -05.13 -03.21 11 2.0 23 13-22 21 156 10 Ca 344.46 -05.09 -03.11 11 1.8 32 16-24 26 157 30 Ca 344.66 -05.02 -03.23 11 1.7 40 15-35 27 171 1 Li 348.96 -03.31 -03.78 10 2.9 13 50-75 11 172 3 Li 348.99 -03.23 -03.77 9 1.7 20 105-360 17 175 3 Ca 349.04 -03.25 -03.84 10 2.9 13 50-75 11 176 10 Ca 349.04 -03.25 -03.84 10 2.9 26 14-25 23 177 30 Ca 349.04 -03.25 -03.84 10 2.9 31 13-39 25 Fornax Fornax A191 1 Li 55.38 -27.20 +107.07 6 1.0 14 30-53 13 192 3 Li 55.38 -27.19 +107.10 6 1.1 29 67-88† 20 195 3 Ca 55.75 -27.47 +106.93 6 1.6 26 14-20 16 196 0.3 Ca 55.75 -27.45 +106.92 6 1.1 10 14-20 9 Sagittarius (Milky Way) (normal) A198 1 Li 278.36 -30.40 -71.72 14 1.6 150 60-144 107 202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375				CONTRACTOR OF THE PARTY OF THE							-	21
A150			100000					-0.000		The second secon		24
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			100,000					2007				25
A150						Aquarius	(geocoro	na)				
151												
152												0
155					The state of the s							1
156			100000	The second second	E00-100-700-0	(E. PETO E. PETO		10000		The second secon		3
157 30 Ca 344.66 -05.02 -03.23 11 1.7 40 15-35 27 171 1 Li 348.96 -03.31 -03.78 10 2.9 13 50-75 11 172 3 Li 348.99 -03.23 -03.77 9 1.7 20 105-360 17 175 3 Ca 352.26 -02.89 -04.39 9 2.3 16 13-29 14 176 10 Ca 349.04 -03.25 -03.84 10 2.9 26 14-25 23 177 30 Ca 349.21 -03.20 -03.87 10 2.9 31 13-39 25 Fornax Fornax A191 1 Li 55.38 -27.20 +107.07 6 1.0 14 30-53 13 192 3 Li 55.38 -27.19 +107.10 6 1.1 29 67-88† 20 195 3 Ca 55.75 -27.47 +106.93 6 1.6 26 14-20 16 196 0.3 Ca 55.75 -27.45 +106.92 6 1.1 10 14-20 9 Sagittarius (Milky Way) (normal) A198 1 Li 278.36 -30.40 -71.72 14 1.6 150 60-144 107 202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)												2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$												4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				The second secon					40	15- 35		4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	171		Li	348.96	-03.31	-03.78	10		13	50- 75	11	2
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	172		Li			-03.77	9		20	105-360	17	2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	175	3	Ca	352.26	-02.89	-04.39	9	2.3	16	13- 29	14	1
Fornax A191	176	10	Ca	349.04	-03.25	-03.84	10	2.9	26	14- 25	23	3
A191 1 Li 55.38 -27.20 +107.07 6 1.0 14 30-53 13 192 3 Li 55.38 -27.19 +107.10 6 1.1 29 67-88† 20 195 3 Ca 55.75 -27.47 +106.93 6 1.6 26 14-20 16 196 0.3 Ca 55.75 -27.45 +106.92 6 1.1 10 14-20 9 Sagittarius (Milky Way) (normal) A198 1 Li 278.36 -30.40 -71.72 14 1.6 150 60-144 107 202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)	177	30	Ca	349.21	-03.20	-03.87	10	2.9	31	13- 39	25	4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						Fo	rnax					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	191	1	Li	55.38	-27.20	+107.07	6	1.0	14	30- 53	13	1
195 3 Ca 55.75 -27.47 +106.93 6 1.6 26 14-20 16 196 0.3 Ca 55.75 -27.45 +106.92 6 1.1 10 14-20 9 Sagittarius (Milky Way) (normal) A198 1 Li 278.36 -30.40 -71.72 14 1.6 150 60-144 107 202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)				6105111010000		The second of the second of						2
Sagittarius (Milky Way) (normal) A198	195	3	Ca					1.6	26		16	2
A198 1 Li 278.36 -30.40 -71.72 14 1.6 150 60-144 107 202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)		0.3	Ca	The same of the same of								0
202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)					Sagit	tarius (Mil	ky Way)	(norm	nal)			
202 3 Ca 278.46 -30.55 -71.78 14 1.4 265 15-30 206 203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)	198	1	Li	278.36	-30.40	-71.72	14	1.6	150	60-144	107	3
203 10 Ca 278.58 -30.42 -71.93 15 1.9 529 30-70 375 Sagittarius (overexposed)	25-62-72			The second second		The state of the s		1000				8
												44
A100 0 II 070 00 00 41 71.77 11 00 071 010 000 7					S	agittarius (overexpe	osed)				
A199 3 Li 278.33 -30.41 -71.75 14 2.0 851 210-300 [‡] 596	199	3	Li	278.33	-30.41	-71.75	14	2.0	851	210-300 [‡]	596	36
204 30 Ca 278.77 -30.37 -72.00 12 1.8 617 50-120 [†] 383												41

[†]Average of ten pixels. [‡]Average of 20 pixels.

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications

Image on Frames
A23,26,27,28
A26,27,28 A93,27,28
A23,27,28 A26,27,28
A23,27,28 A22 A27
A59,63,64
A58,59,62,63,64
A69,72,73,88,92,93 A93,94
Footnotes are at the end of the table.

Table 2-Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

R.A.(1975)Dec.	75)Dec.	Image on Frames	D-Vol/Exp	d:	RNGC*	R.A.(1975)Dec.	75)Dec.	Mag.	Type
			Ь	Pavo					
22:14	-49:23	A118,121	294Li,	67Ca					
			Mensa (LMC not included)	3 not includ	led)				
03:26	-77:08	A130		21Ca					
03:36	-79:26	A129,130		12-23Ca					
03:47	-77:27	A129,130		11-24Ca					
04:27	-80:34	A130		8Ca					
04:33	-80:10	A130		12Ca					
04:36	-78:31	A129,130		25-39Ca					
04:36	-74:35	A130		24Ca					
04:38	-79:53	A129		8Ca					
04:40	-82:00	A129,130		18-21Ca					
04:41	-83:02	A129,130		11-32Ca					
04:59	-74:40	A129		19Ca	1777?	04:56.4	-74:19		Cluster LMC
05:14	-77:15	A129,130		12-28Ca					
05:19	-75:16	A130		15Ca					
05:21	-77:39	A125,129,130	29Li,	261Ca	1956?	05:20.9	-77:46	Faint	Galaxy
05:26	-77:36	A125,129	148Li,	27Ca					
05:32	-79:07	A130		15Ca					
05:33	-79:13	A129 [†] ,130		31-35Ca					
05:48	-75:01	A124,125	126-182Li						
05:49	-70:03	A125	251Li					ш	
05:58	-68:29	A130		26Ca	2164	05:58.8	-68:31	10.5	Cluster LMC
06:02	-69:48	A130		13Ca	2187?	06:04.1	-69:34		Galaxy
06:03	-77:00	A129,130		11-15Ca					
06:03	-74:22	A129,130		25-41Ca	2190?	06:01.6	-74:43		Globular LMC
06:05	-75:01	A125,129,130	36Li,	23Ca	2203?	9.30:90	-75:26		Cluster LMC
20:90	90:82-	A124,129,130	106Li,	52Ca					
80:90	-78:06	A125	94Li						
80:90	-65:13	A129,130		16-37Ca					
06:19	-71:35	A125	229Li						
06:23	-66:34	A129,130		16-17Ca					
06:29	-73:11	A129,130		23-30Ca					

Table 2- Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

Type																																			
Mag.																																			
R.A.(1975)Dec.																																			
RNGC*																																			
Exp	Mensa (continued)	10-17Ca	191Ca	140Ca	62-66Ca	190Ca	518Ca	214Ca	51Ca	189Ca	38Ca	24-40Ca	141Ca	51Ca	20-25Ca	59Ca	13-40Ca	382Ca	67Ca	56Ca	7Ca	13-27Ca	99Ca	167Ca	90Ca		28Ca	98Ca	13-23Ca		60-100Ca	115Ca		25-26Ca	77-87Ca
D-Vol/Exp	Mens		140Li,	157Li,		95Li,	494Li,	67Li,		97Li,			391Li,	46Li,		70Li,		214Li,	64Li,	42Li,			33Li,		222Li,	160-203Li		76Li,		297Li		99Li,	131Li		
Image on Frames		A129,130	A125,129,130	A125,129,130	A129,130	A125,129,130	A125,129,130	A125,129,130	A129	A124,125,129,130	A129	A129 [†] ,130	A124,125,129,130	A125,129	A129,130	A125,129,130	A129,130	A124,125,129,130	A125,129,130	A125,129,130	A130	A129,130	A125,129,130	A130	A124,125,129,130	A124,125	A130	A125,129	A129,130	A124	A129,130	A124,129,130	A124	A129,130	A129.130
75)Dec.		-71:58	-68:51	-70:51	-69:12	-68:10	-65:36	-66:22	-67:36	-76:35	-75:46	-76:28	-72:50	-71:36	-69:16	-73:22	-76:18	-76:28	-72:40	-76:43	-77:37	-68:18	-77:00	-77:39	-77:29	-77:05	-76:55	-77:37	-76:59	-77:28	-70:40	-70:22	-75:41	-76:30	-70:17
R.A.(1975)Dec.		06:29	06:31	06:38	06:43	06:43	06:43	06:44	06:45	06:55	76:57	89:90	89:90	89:90	89:90	69:90	07:02	07:03	80:20	07:11	07:12	07:13	07:14	07:15	07:15	07:15	07:15	07:16	07:17	07:19	07:24	07:25	07:32	07:37	07:40

Table 2-Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

											-	_		-	-			-	_					_			
Type		Galaxy																		SB3 galaxy			Globular				
Mag.		Faint																	E	11.5		8	8.5				
75)Dec.		-71:20′																		-62:48			-67:02				
R.A.(1975)Dec.		h m 07:45.4																		17:14.6			17:29.2				
RNGC*		2466?																		6300			6362				
dxp	Mensa (continued)	81-86Ca 304Ca	24-74Ca 356Ca	Norma (for N6300)	47Ca	178Ca	212Ca	1162Ca	10204	28-42Ca	242Ca	35-43Ca	100Ca	42-96Ca	54-62Ca	196Ca	152Ca	132Ca	79Ca	90Ca	34Ca		1016Ca		62-95Ca	209Ca	96Ca
D-Vol/Exp	Mensa	190Li, 1942Li		Norma	89Li,	94Li,	388Li,	1205Li,	94Li		271Li,		94Li,			54Li,	165Li,	149Li,		37Li	34Li.	28Li	1611Li,	75Li		195Li,	140Li,
Image on Frames		A129,130 A124,125,129,130	A129,130 A130 S, see S201 Atlas of the LMC)		A145,149	A145,148,149	A145,148,149	A144,145,148,149	A145	A148,149	A144,148,149	A148,149	A144,145,148,149	A148,149	A148,149	A145,148 [†] ,149 [†]	A145,148 [†] ,149	A144,148,149	A148,149	A145 149	A145,149	A145	A144,145,148,149	A145	A148,149	A144,145,148,149	A145,148,149
75)Dec.		-77:28' -70:57	08:03		-64:32	-64:25	-65:59	-65:57	-58:16	-56:48	-57:13	-53:59	-54:29	-53:36	-54:30	-53:09	-53:05	-53:17	-54:42	-67:58	-57:45	-55:55	-66:53	-54:57	-68:58	-64:53	-54:09
R.A.(1975)Dec.		07:42 07:43	08:03 08:16 (For object		16:17	16:17	16:27	16:31	16:45	16:47	16:51	17:07	17:08	17:08	17:09	17:09	17:09	17:10	17:11	17:21	17:22	17:24	17:28	17:31	17:34	17:42	17:43

Table continues.

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued)

Type				Nebula	Galaxy		Galaxy		Plan. neb.			Ciuster	Globular	Clustor	Chaster
Mag.				15 ^m	Faint		Faint				E,	e. ,	10.5	a, r	0.1
5)Dec.				-06:44	-07:03		-00:04		-25:56		0 11	-21:04	-30:02	97.49	
R.A.(1975)Dec.				22:52.7	23:15.9		23:29.2		03:32.3		0.00	6:10:01	18:02.0	8 70.81	0.10.01
RNGC*			0	7406?	7596?		7684?		1360	y)	60639	6520?	6522	65402	
dx	Norma (continued)	261Ca 362Ca 247Ca 445Ca	Aquarius (Geocorona)	40-78Ca 14-35Ca	71Ca 106Ca	117Ca 143Ca		Fornax	360Ca 108Ca	Sagittarius (Milky Way)	66-92Ca 29-54Ca	895Ca	25-34Ca	64Ca	44-51Ca
D-Vol/Exp	Norma	265Li, 225Li, 210Li, 401Li,	Aquariu	:1131	97Li,	163Li, 149Li,	32Li		802Li, 260Li,	Sagittari		2032Li,	2011	2380Li,	
Image on Frames		A144,145,148,149 A144,145,148,149 A145,148,149 A145,148,149		A156,157 A156,157,176,177	A152,155,156 A175,176,177	A152,155,156,157 A171,172,176,177	A111,172 A152		A191,192,195 A192,195		A203,204 A203,204	A198,199 [†] ,202,203,204	A203,204	A199,203,204	A203,204
75)Dec.		-61:59 -66:15 -65:36 -66:56		-13:35	-06:37	-05:20	+00:24		-25:58		-32:58	-27:32	-29:59	-25:29	-28:49
R.A.(1975)Dec.		h m 17:45 17:46 17:46 18:13		22:49 22:54	23:16	23:19	23:28		03:32 04:00		17:56	18:00	18:01	18:02	18:04

Table continues.

Type Plan. neb. Nebula Globular Globular Nebula Cluster Cluster Nebula (no?) 13^m Faint Faint Mag. Faint 15m 15m 9m E.5. Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Continued) -27°:49' -26:36 -26:50 -32:22 -29:33 -28:11 -24:08 -26:50 -31:47 -21:36 R.A.(1975)Dec. h m 18:04.8 18:08.4 18:10.3 18:21:4 18:29.7 18:07.4 18:08.6 18:08.6 18:11.3 18:21.4 RNGC* 6551? 6557? 6565 6540 6568? 6620? 6620? 6558? 6559? 6558? Sagittarius (continued) 11-65Ca 10-23Ca 405Ca 28-32Ca 27Ca 57Ca 51-53Ca 25Ca 9Ca 12-63Ca 29Ca 8-21Ca 11Ca 34Ca 25Ca 37Ca 8Ca 90Ca 213Ca 9-11Ca 32Ca 29Ca 57-66Ca 22Ca 46Ca 22Ca 15Ca 28-80Ca 51-56Ca 259-416Ca 40-62Ca D-Vol/Exp 396Li 58Li, 37Li, 82Li, 64Li, 384Li, 84Li, 76Li 103Li, 57Li 177Li, 115Li, 46Li, 272Li, 168Li, 574Li, 250Li, Image on Frames A199,202,203,204 A203,204 A199,203,204 A199,203,204 A203,204 A199[†] A199,203,204 A199[†],203,204 A203,204 A199,203,204 A203,204 A199,203,204 A203,204 A203,204 A203 A199,203,204 A199,203,204 A202,203,204 A203,204 A203,204 A199 A199,203,204 A202,203,204 A203,204[†] A199,203,204 A199,203,204 A199,203,204 A199,204 A199,203 A199,203 A203,204 A199 A203 A204 22.446 26.666 22.25.53 29.33 29.33 29.33 29.33 29.04 29.07 20.07 2 R.A.(1975)Dec.

Table 2 — Positions of Non-SAO Objects (NOs) and Possible Identifications (Concluded)

Type									Nebula				
Mag.													
75)Dec.									-37:00				
R.A.(1975)Dec.								4	19:00:1				
RNGC*	(p								6729				
Exp	Sagittarius (continued)	9-12Ca	441Ca	27-47Ca	93-126Ca		19-22Ca		142Ca			16Ca	298Ca
D-Vol/Exp	Sagitta		439Li,			4074Li		263Li		76Li	114Li	708Li,	405Li,
Image on Frames		A203.204	A199,202,203,204	A203,204	A202,203	A199 [†]	A203,204	A198 [†]	A203	A199	A199 [†]	A198,199,203	A199,202,203,204
75)Dec.		-30°:26′	-39:45	-39:20	-33:16	-26:13	-29:16	-26:27	-36:59	-35:03	-27:39	-26:50	-34:56
R.A.(1975)Dec.		h m	8:43	8:44	8:47	8:50	8:56	8:58	00:6	9:01	9:10	9:10	9:14

*RNGC = The Revised New General Catalog of Nonstellar Astronomical Objects, by J.W. Sulentic and W.G. Tifft, Univ. of Arizona Press, 1973. A question mark (?) after the RNGC number indicates that the position differs by more than 5 arc-min.

†Two close images.

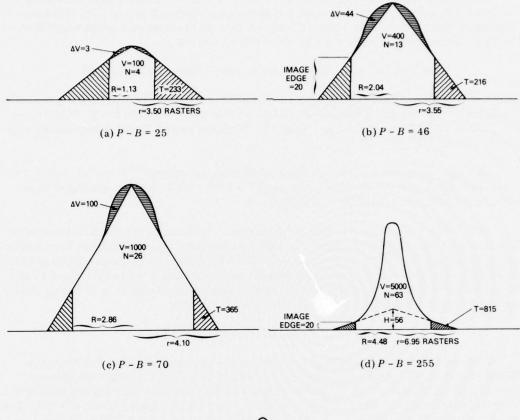
Table 3 — Corrections to S201 Density Volumes*

T																
≈ 250	$\log V_c/V$	0.596	0.462 0.394 0.298 0.244	0.218	0.189	0.177	0.166	0.151	0.136	0.131	0.125	sible	sible	sible	sible	Sinie
For High B	V_c/V	3.94	2.89 2.47 1.98 1.75	1.65	1.54 1.52	1.50	1.465	1.415	1.37	1.35	1.33	Not possible				
Fo	V_c	325 363	433 494 594 700	825 945	1080 1215	1350 1490	1760 2015	2265	2740	3380	5320	0000				
≈ 50	$\log V_c/V$	0.559	0.420 0.353 0.260 0.206	0.180	0.152	0.142	$0.125 \\ 0.115$	0.108	0.090	0.088	0.081	0.072	0.065	0.060	0.054	0.047
For Normal B	V_c/V	3.62	2.63 2.25 1.82 1.605	1.51	1.42	1.38	1.33	1.28	1.23	1.22	1.20	1.18	1.16	1.146	1.130	011.1
For I	V_c	290 333	394 450 545 642	745	995	1245 1365	1595 1820	2050	2460	3050	4800	2890	9280	11460	13550	00/01
Only	$\log V + T/V$	0.559	0.420 0.353 0.260 0.206	0.180	0.152	0.142 0.136	0.125 0.115	0.106	0.084	0.082	0.069	0.056	0.047	0.042	0.038	200.0
Truncation Only	V + T/V	3.62	2.63 2.25 1.82 1.605	1.51	1.42	1.385	1.33	1.275	1.21	1.207	1.17	1.136	1.113	1.100	1.090	1.0.1
	T	210	244 250 245 242	245	295 320	345	395	440	420	520	089	820	910	1000	1100	0711
Н	:	25 27	31 34 40 46	49	53	54	54	55	26	56	99	58	64	29	072	200
P-B		22	30 34 40 46	49 54	58	64	78	105	140	165	225	285	315	345	365	000
2	;	3.5	6 7.5 10 13	15	20 22	24 26	30	32	34	38	52	72	87	103	118	
Λ		100	150 200 300 400	900	800	1000	1200 1400	1600	2000	2500	4000	0009	8000	10000	15000	00000

Table 3- Corrections to S201 Density Volumes* (Concluded)

For High $B \approx 250$	V_c/V log V_c/V	Not possible Not possible Not possible Not possible Not possible Not possible
For	V_c	
3 ≈ 50	V_c/V log V_c/V	0.032 0.028 0.022 0.014 0.010 0.008
For Normal $B \approx 50$	V_c/V	1.074 1.066 1.050 1.030 1.020 1.016
For I	V_c	26900 32000 42000 51500 61250 81400
Only	V + T/V log $V + T/V$	0.021 0.018 0.014 0.008 0.004 0.003 0.000
Truncation Only	V + T/V	1.048 1.040 1.030 1.016 1.010 1.005
	T	1200 1200 1200 900 600 400 100
	Н	96 104 131 200 311 420 455
	P - B	405 410 415 420 425 425 440 440
	N	207 240 300 365 430 525 715
	^	25000 30000 40000 50000 60000 80000

*V = density volume of an identified star image in units of 0.01D square raster; N = number of points (pixels) with density 20 (0.2D) above background B; P - B = peak density above background in units of 0.01D; H = height of "wing cone" (see Figs. 14d and 14e); T = correction for truncation in the STAR DETECTION program; B = local background density in units of 0.01D; V_c = fully corrected density volume in units of 0.01D-square-raster.



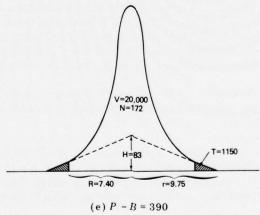


Fig. 14- Correction to the measured density volume for image truncation (due to the PDS scan speed and the S201 nonlinear response)

The image cross sections show that for V > 1000 there is usually a wing or skirt extending several rasters beyond the measured image edge, as shown in Fig. 14b. This was fitted fairly well by extending a cone of height H beyond the measured image edge. Then the truncation correction is the volume of the H-cone rim, or

$$T = (N/3) H^3 / (H - 20)^2 - (N/3) (H - 20) - 20N$$
, for $V > 400$.

Values of H obtained from cross sections were plotted against V, and values of the resulting smoothed relation are listed in Table 3. At low V, H is nearly equal to P-B. In the range V=1000 to $15{,}000$, H remains near 60, and P-B climbs to 350. In the large, overexposed images H reapproaches P-B.

Although uncertainties in H and T are fairly large, the ratio T/V drops off rapidly, as shown in Table 3, and the uncertainty in log [(V+T)/V] for V > 400 is estimated to be less than 0.05 (less than 0.02 for V > 20,000).

The PDS lag correction $\Delta\Delta$ and the linearizing correction ΔD are listed in Table 4a as functions of P – B and P respectively. The PDS lag correction $\Delta\Delta$ was obtained from a speed test on four star images of different peak densities. The linearizing correction ΔD was obtained by measuring uniform geocorona densities on three frames, A40, A41, and A42 (1-, 3-, and 10-min ILi exposures), and up to measured density D_M = 350 units (3.5D) is closely represented by the following expression for linearized density:

$$D_L = D_M + \exp[0.674(D_M - 130)^{0.39}].$$

These two corrections have been applied to the image peak densities P as shown in Tables 4b and 4c, giving fully corrected density volumes V_c . The "normal" background $B\approx 50$, and the correction for nonlinear response is small for faint and medium star images. However on three frames (A41, A145, and A199) there is a high background: $B\approx 250$. This requires a correction to measured V even for faint images, as shown in Tables 4c and 3. Since the high background is subtracted from the (higher) star-image densities, the correction is the difference between ΔD for density P and ΔD for density 250, as given in Table 4c. This high-background correction cannot be given for V>5000, where P-B>250, and for P>500, the upper limit to densities recorded by the PDS microdensitometer.

Table 3 lists V_c (fully corrected) for values of measured density volume V, and log V_c/V is plotted in Figs. 15a, 15b, and 15c. The correction for images on high background is considerably larger.

Figures 16 through 22 are plots of V magnitude vs log V/E (E is the exposure in minutes) on ILi and ICa frames. They show a scatter of about 1 magnitude about the expected relation V mag + 2.5 log V/E = K. The average intercept \bar{K} and the rms deviation σ are labeled on each plot, and large deviants are listed in Table 5. These derivations are probably due to:

- Differences in interstellar extinction,
- Errors in background (B) estimates,
- Corrections to V for truncation, PDS lag, and nonlinear response given in Table 3 but not applied to the figures,
- Errors in SAO visual magnitudes and/or spectral types, and
- Actual differences in the far-ultraviolet flux from stars of a given spectral type.

Table 4a — Corrections to Peak Densities P for PDS Lag $\Delta\Delta$ and Linearization ΔD^*

P - B	$\Delta\Delta$	P	ΔD
50	0	50	0
100	0	100	0
150	0	150	+10
200	+10	200	30
250	20	250	80
300	40	300	150
350	70	350	270
400	100	400	400
450	140	450	600
500	180	500	870

^{*}P = Peak density of a star image;

B = local background density; $\Delta\Delta$ = correction for lag in the PDS microdensitometer;

 ΔD = correction for non linear response of the S201 camera;

All densities are in units of 0.01D.

Table 4b — Applied Corrections $\Delta\Delta$ and ΔD for Normal Background, $B\approx 50*$

V	V + T	P - B	$\Delta\Delta$	P = P - B + 50	ΔD	V_c	V_c/V	$\log V_c/V$
1000	1365	70	0	120	0	1365	1.365	0.136
1300	1710	84	0	134	0	1710	1.315	0.120
1540	1975	100	0	150	10	1985	1.287	0.110
2100	2540	150	0	200	30	2570	1.224	0.088
3300	3910	200	10	250	80	4000	1.210	0.084
4800	5575	250	20	300	150	5745	1.197	0.079
7000	7865	300	40	2-0	270	8175	1.167	0.068
10500	11525	350	70	4.0	400	11995	1.143	0.058
23500	24680	400	100	450	600	25380	1.080	0.034
94000	94100	450	140	500	870	95110	1.012	0.006

^{*}V = Density volume of a star image; T = correction for truncation in the STAR DETECTION program.

Table 4c — Applied Corrections $\Delta\Delta$ and ΔD for High Background, $B\approx 250$

V	V + T	P - B	$\Delta\Delta$	P = P - B + 250	$\Delta D - \Delta D(250)$	V_c	V_c/V	$\log V_c/V$
50	268	21 0 271		24	292	5.84	0.767	
80	290	22	0	272	25	315	3.94	0.596
100	333	25	0	275	30	363	3.630	0.560
150	394	30	0	280	40	434	2.89	0.462
200	450	34	0	284	45	495	2.47	0.394
300	545	40	0	290	50	595	1.98	0.298
400	642	46	0	296	60	702	1.753	0.244
500	745	50	0	300	70	815	1.630	0.21
1540	1975	100	0	350	190	2165	1.405	0.149
2100	2540	150	0	400	320	2860	1.363	0.135
3300	3910	200	10	450	520	4430	1.343	0.129
4800	5575	250	20	500	790	6365	1.325	0.124

The many negative deviations, indicated by L in Table 5, are probably due to large interstellar extinction, and the positive deviations (H) may be due to stars' far-ultraviolet excess — both worthy of further study. The visual magnitudes and spectral types given in the SAO catalog are based on the Henry Draper Catalog; these often differ markedly from more modern determinations in specific regions of the sky, such as Orion [12].

The corrections to log V/E given as log V_c/V in Table 3 and in Figs. 15 will move points at the upper left on Figs. 16 through 22 toward the right by the amount log $V_c/V \approx 0.25$. This, however, will not account for the large deviants.

COMPARISON WITH STELLAR MODELS

To compare the measured far-ultraviolet fluxes with expectations (with more accuracy used than used in the STAR PLOT program) the S201 camera response in the direct-imaging mode (Fig. 3) was folded with model atmosphere calculations by Kurucz, Petremann, and Avrett [13] and the "average" far-ultraviolet extinction curve of Bless and Savage [14]. For a monochromatic diffuse source the optical density of the image on the processed emulsion is given by D=Ist, where I is the monochromatic source density in kilorayleighs $(1kR=10^9/4\pi\ photons/cm^2\ s\ sterad)$, s is the diffuse-source sensitivity in density units/kR seconds, and t is the exposure time in seconds. (E or EXP is used in this catalog for exposure time in minutes.)

The sensitivity s is the product of the overall detection (quantum) efficiency η , the "blackening factor" b (density units/photoelectron per μm^2 , at the emulsion), and a geometrical factor G depending on the focal ratio of the optical system: $G=10^{-8}A/f^2$, where A is the effective aperture in cm² and f is the focal length in cm. Thus for a monochromatic diffuse source

$$D = \frac{10^9}{4\pi} \quad I \, \eta \, \, bGt = \Psi_{\lambda} \, \eta \, \, bGt,$$

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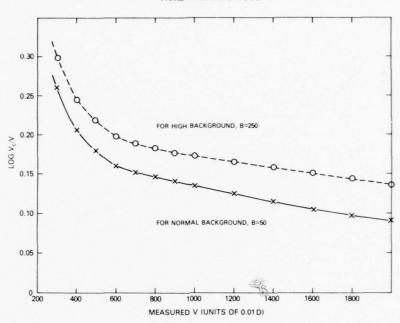


Fig. 15a — Relation of the fully corrected density volume V_c to the measured density volume V, plotted for $O \leqslant V \leqslant 90{,}000$

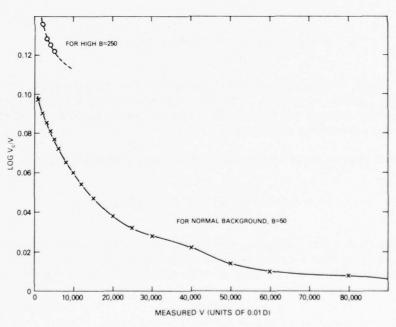


Fig. 15b — Relation of $V_{\rm C}$ to V, plotted for $200 \leqslant V \leqslant 2000$

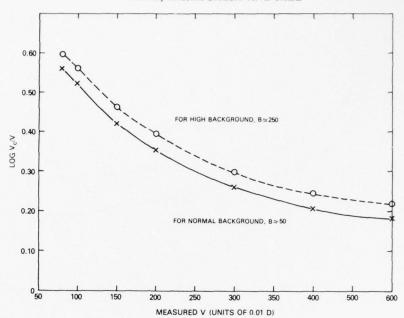


Fig. 15c — Relation of V_c to V, plotted for $50 \le V \le 600$

where Ψ_{λ} is the diffuse flux expressed in photons/cm^2 s sterad. For a nonmonochromatic source

$$D = b Gt \int \Psi_{\lambda} \eta_{\lambda} d\lambda = b Gt \Psi_{\lambda \, eff} \eta_{\lambda \, eff} \Delta \lambda_{eff},$$

where λ_{eff} is the effective wavelength of the camera for a flat continuum ($\Phi_{\lambda\,eff} = \Phi_{\lambda} = \text{constant}$) and $\eta_{\lambda\,eff}\Delta\lambda_{eff}$, or $(\eta\Delta\lambda)_{eff}$, is the area under the curve of efficiency vs wavelength (half of which falls on either side of λ_{eff}). The result is relatively insensitive to slight changes in the shape of the continuum distribution.

For a point source the number of photoelectrons recorded in the image is

$$n = At \int \Phi_{\lambda} \eta_{\lambda} \ d\lambda = At \ \Phi_{\lambda \, \mathrm{eff}} (\eta \Delta \lambda)_{\mathrm{eff}},$$

where Φ_{λ} is the photon flux (photons/cm² s Å). The density distribution in the recorded image of course depends on the resolution and details of the image structure. However, if linearity of response is assumed, the total density volume is independent of these details and is

$$V = \int D \ dA = \tilde{D}A = b \int \left(\frac{n}{A}\right) dA = nb.$$

Table continues.

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog

Negative deviations (density volumes lower than expected) are indicated by L, and positive deviations (higher than expected) are indicated by H. The frames are in order of right ascension.

									-		-			
Remarks		7 rasters from edge of field 15r from EOF, L on frame 64 15r from EOF, L on 63 40r from EOF					L on 130, edge of LMC L on 129, edge of LMC	In LMC						
y		980 77 135 394	168249 03:00:18 29 Fornax	509 749		419	481	519	474	344	929	133		
×		507 689 692 29		699		343	855 856	831	939	218	562	556		
R.A.	Cetus	02:08:33 03:15:50 03:15:50 03:00:18		03:45:31 03:33:37	Mensa	06:30:31 06:12:26	05:50:21 05:50:05	05:41:57	05:50:36	07:13:16	04:00:14	07:25:14		
SAO	Ce	148254 130410 130410 168249		Fo	Fo	168836 149061	Me	256308 256277	249368 249368	249336	249373	256381	256053	256408
Approx.		1400 20 11 40		31 5260		45	2800 1500	1250	9 4	12	25	16		
)/E		нллл		П			ПП		ם ב	L	П	Г		
$\log D/E$		3.15 1.3 1.05 1.6		1.5		1.65	3.45	3.1	0.65	1.1	1.4	1.2		
Spec. Type		A0 B8 B8 A3		A2 A2		A0 A0	B5 B5	A0	A0	A0	A0	A2		
V Mag		7.9 8.3 8.3 4.3		5.04		7.0	5.1	7.1	7.95	7.9	6.7	6.5		
Frame		59Li 63Ca 64Ca		192Li 195Ca		125Li	129Ca 130Ca	: :		: :	,			

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Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

-	1	-																							
Remarks			Another image, $D/E = 8122$		H on 145								H on 144		L on 148,149		10r from EOF		5r from EOF, L on 149	L on 144,149	5r from EOF, L on 145		5r from EOF, L on 148		
8		450	548	115	207	847	408	108	333	103	420	94	204	285	368	494	39	211	17	361	447	110	22	119	92
×		251	692	473	221	464	692	999	239	889	124	009	222	638	130	523	555	238	528	133	886	569	526	415	575
R.A.	ma	17:27:22	17:19:03	16:33:35	17:00:02	18:15:48	16:50:39	16:26:22	17:13:34	16:16.06	17:29:49	16:22:16	16:59:55	16:43:00	17:23:15	17:20:19	16:19:42	17:00:43	16:20:19	17:23:22	16:38:12	16:26:51	16:20:27	16:39:01	16:24:24
SAO	Norma	244806	253903?	244003	244400	245405	253734	243899	244593	243647	244843	243796	244400	244134	244755	244705	243741	244409	243750	244755	253673	243899	243750	244089	243844
Approx. D/E		100	100	06	840	4336	06	80	30	40	40	40	1000	80	45	35	133	40	125	63	20	33	35	22	35
$\log D/E$			2.0 L		2.9 H	3.65 H	1.95 L			1.6 L		1.6 L	3.0 H		1.65 L		2.12 L	1.6 L		1.8 L				1.35 L	
Spec. Type		B3	B3	B8	B8	B8	A0	B0	B8	B8	B8	B8	B8	B9	B9	A0	B5	B3	B3	B9	A0	B0	B3	B5	B5
V Mag		8.25	5.9	7.85	8.75	7.2	6.1	8.75	8.75	8.7	8.5	7.9	8.75	7.3	6.05	7.25	7.74	0.6	8.05	6.05	6.3	8.7	8.05	8.9	9.8
Frame		144Li	"	"	=	"	"	145Li		"								148Ca		,,		149Ca	,,		

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

									_			_	_	_								
Remarks		20r from EOF	1 00 145 140	Lon 145,146 20r from EOF	10r from EOF				H on 202,203			H on 199,202,203,204	10r from EOF, H on 203	H on 203	H on 202,203			Turo images I on 903	I we minges, i on too	10r from EOF	Another image, $D/E = 38$	Another image, $D/E = 4146$
8		68	234	59	09		324	300	120	782	342	418	271	83	231	773		140	145	247	94	197
×		105	548	376	289		405	573	321	275	708	182	919	358	505	409		768	765	910	634	792
R.A.	Norma (continued)	16:14:28	16:43:10	16:35:31	16:11:47	Sagittarius (Normal)	18:20:14	18:13:04	18:06:49	19:03:08	18:12:20	18:35:00	17:57:52	18:02:49	18:09:25	18:59:09	Sagittarius (Overexposed)	17:52:38	17:53:06	17:55:59	17:53:56	17:56:22
SAO	Norma (c	243572	244136	244027	243509	Sagittarius	186748	209938	186389	187672	209919	187070	209597	186268	186471	187600	Sagittarius (C	209489	209489	209560	185985	209569
Approx. D/E		70	37	320	25		100	92	4664	06	06	917	1600	1920	260	1490	0.	32	26	80	20	400
$\log D/E$		1.85 L 1.5 L		2.1 L 2.5 H			2.0 L			1.95 L				3.3 H	2.75 H	3.2 L		1.5 L			1.7 L	
Spec. Type		B5 B8	B9	B9	A2		B0	B3	B5	B8	B9	B9	B9	B9	A0	A2		0	0	0	B3	B3
V Mag		8.45	7.75	9.0	5.9		8.8	8.85	9.7	7.1	6.9	9.4	8.9	8.10	9.5	2.65		9.9	9.9	7.25	9.2	7.2
Frame		149Ca	: :	Ł			198Li		. :		: :	: :	: :	: :	: :			199Li		"		=

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

			_	_	_	_		_	_	_		_	_	_					_	_					-	_	
Remarks		Another image, $D/E = 283$	Another image, $D/E = 35$			Another image, $D/E = 624$			L on 203	Another image, $D/E = 180$	15r from EOF, H on 198,203	H on 202,203					Another image, $D/E = 96$	Another image, $D/E = 395$			H on 203					3r from EOF	
8		151	128	86	298	367	296	283	209	146	272	419	722	855	702	319	130	168	363	322	43		110	CIT	124	53	199
к	nued)	239	324	589	803	715	232	528	405	514	918	182	805	693	855	649	524	366	353	476	463		609	760	394	399	687
R.A.	Sagittarius (Overexposed) (continued)	18:11:52	18:07:14	17:55:48	18:04:46	18:14:10	18:23:13	18:12:51	18:36:03	18:02:05	17:57:53	18:34:56	18:44:03	18:59:42	18:40:36	18:12:10	18:00:28	18:08:49	18:24:59	18:17:47	17:55:41	Sagittarius (Normal)	17.54.90	11.04.40	18:05:01	17:57:52	18:01:02
SAO	rius (Overex	186539	186406	186025	209755	209966	186815	186556	187089	186249	209597	187070	210570	210853	210501	209906	186201	186443	186846	186684	186033	Sagittarius	900591	770007	186332	186086	209664
Approx.	Sagitta	1400	4000	16000	56	81	1400	1542	63	1250	2000	2000	2600	47	200	225	1141	462	758	877	160		0.0	2	80	32	80
$\log D/E$		3.15 Н	3.6 H	4.2 H	1.75 L		3.15 H	3.2 H	1.8 L	3.1 H	3.3 H	3.3 H	3.75 H	1.7 L	2.3 L	2.35 H	3.15 H	2.7 H	2.85 H	2.95 H	2.85 Н		1 98 1		1.9 L	1.5 L	1.9 L
Spec. Type		B5	B5	B5	B8	B8	B8	B8	B9	B9	B9	B9	B3	A0	A0	A0	A0	A0	A0	A0	A2				B2	B3	B3
V Mag		0.6	8.80	5.95	8.2	7.0	9.1	9.8	7.45	0.6	8.9	9.4	6.95	7.2	5.1	9.6	9.2	9.5	8.7	8.8	8.5		20.0	0.7.0	8.5	9.8	8.1
Frame		199Li			,,	"	2			=		,					: :	: :					90900	20204			2

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

	Mag	Type	$\log D/E$	Approx. D/E	SAO	R.A.	x	y	Remarks
				Sag	ittarius (Nor	Sagittarius (Normal) (continued)	(pai		
202Ca	8.9	B5		26	186166	17:59:59	599	149	
	7.9	B5	1.55 L	35	186189	18:00:18	481	104	
	9.7	B5	3.55 H	3500	186389	18:06:57	315	114	H on 198,203
	7.9	B9	1.5 L	31	210276	18:28:51	832	564	
	6.55	B9	10	99	209503	17:53:17	770	144	
	9.4	B9	2.7 H	200	187070	18:34:59	177	412	H on 198,199,203,204
	8.9	B9	3.28 H	1900	209597	17:57:51	914	265	7r from EOF, H on 198,199,203
	9.5	A0	2.55 H	350	186471	18:09:26	500	225	H on 198,203
	5.1	A0	2.2 L	160	210501	18:40:33	847	694	L on 204
203Ca	6.62	0	1.97 L	96	209489	17:52:45	772	131	L on 199
	8.3	B2		45	209568	17:51:20	817	195	L on 204
	9.05	B3	1.8 L	62	209456	17:51:19	811	132	L on 204
	0.6	B5	1.35 L	22	186345	18:05:28	465	157	L on 204
	8.95	B5	1.65 L	45	209934	18:13:01	616	447	10r from EOF, L on 204
	9.7	B5	3.45 H	2950	186389	18:06:53	323	111	H on 198,202
	8.5	B8	1.2 L	16	186861	18:25:47	401	378	
	8.1	B8		18	186067	17:57:04	428	56	3r from EOF
	8.9	B9		10	186882	18:26:38	322	360	
	8.1	B9	1.25 L	18	187225	18:41:53	392	260	
	7.45	B9		40	187089	18:36:09	408	661	L on 199
	9.05	B9	2.6 H	390	209634	17:59:24	880	260	
	9.3	B9	2.65 H	450	186360	18:05:49	313	92	
	9.4	B9	2.72 H	550	187070	18:34:55	185	409	H on 198,199,202,204
	8.9	B9	3.35 H	2440	209597	17:57:53	922	262	7r from EOF, H on 198,199,202
	8.1	B9	3.25 H	1790	186268	18:02:58	360	75	H on 198
	7.4	V	105 1	11	909993	18.19.19	896	379	L. on 204

Table 5- Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

-
Spec. $\log D/E \mid \log D/E \mid D/E$
A0 1.7 L 50
A0 2.55 H 350
2.65 Н 4
1.55 L
A2 1.70 L 50 A2 2.35 H 238
B2 1.55 L 35
B3 1.4 L 2
1.65 L
2 T
B8 1.3 L 20
0.65 L
0.75 L
T 29.0
0.95 L
2.45 H 54
0.77 L
A0 0.77 L
2.4 L
A0 2.35 H 225
A0 1.82 H 67
A0 2.55 H 355

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued)

Remarks		L on 46 L on 45		less H on 121			H on 22		7r from EOF	L on 23	H on 21		7r from EOF	H on 23,26,27,28	L on 22	5r from EOF			
8		338 662 659		247		168	517	436	445	395	512	213	111	498	397	92	695	187	211
х		395 756 769		540		812	622	597	981	812	629	999	251	732	808	094	800	184	543
R.A.	Capricorn	21:14:23 21:01:42 21:01:39	Pavo	20:45:10	Cygnus	20:54:42	21:12:09	21:15:35	20:35:23	20:53:28	21:12:12	21:11:11	22:01:00	21:01:22	20:53:26	21:02:14	20:52:58	22:05:49	21:24:59
SAO	Capr	164275 189986 189986	Pa	246739	Сув	50263	71104	71165	70291	50230	71104	50583	51595	70837	50230	50411	70662	51671	50859
Approx. D/E		31 52 67		125		1290	3300	400	3500	536	3700	200	200	800	099	1250	30	45	70
$\log D/E$		1.45 L 1.72 L 1.8 L		2.1 Н		3.15 L	3.52 H	2.6 L	3.55 Н	2.72 L		2.3 L			2.82 L			1.65 L	
Spec. Type		A0 A3 A3		A5		0	B3	A0	A2	B0	B3	B3	A0	A2	B0	B8	B9	B9	B9
V Mag		6.8 4.9 4.9		10.2		6.9	7.7	4.3	8.6	7.1	7.7	7.9	5.5	8.5	7.1	8.5	8.0	9.7	7.3
Frame		45Ca ,, 46Ca		118Li		21Li				22Li		: :			23Li		,,	"	

Table continues.

10r from EOF, also D/E = 25Another image?, D/E = 103H on 22,26,27,28 Another image?, D/E = 19Remarks 10r from EOF Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Continued) H on 22 H on 28 L on 28 L on 28 H on 28 H on 22 27 L on 767 357 497 239 $\frac{184}{155}$ 676 536 134 530 772 674 261 21:10:37 21:27:15 22:03:10 20:40:46 21:10:36 21:27:08 21:59:25 21:59:22 20:59:06 21:47:38 22:06:12 21:06:39 21:44:21 21:44:21 21:11:24 20:51:55 21:01:21 21:19:14 21:01:24 20:51:37 21:01:31 21:50:14 21:15:09 Cygnus (continued) R.A. 50189 70837 50666? 70410 50567 50925 70791 71747 72055 70971 51277 50751 71086 50567 50925 72016 71237 70837 50189 70837 51388 71950 5141751388 SAO Approx. D/E125 700 775 500 140 93 32 40 THE HULL LANGE THE HE $\log D/E$ ннн 111 H 1.27 1.98 1.85 1.4 1.08 1.35 1.28 1.28 1.25 1.25 1.35 2.35 2.32 2.38 2.1 2.8 2.7 2.15 1.82 1.5 1.6 Spec. Type A0 A2 A2 A2 A3 B8 B9 7.6 VMag 6.0 Frame 27Ca 28Ca " 23Li

Table 5 — Deviant Density Volumes in the S201 Far-Ultraviolet Catalog (Concluded)

Table 3 — Deviant Density Volumes in the S201 Par-Unaviolet Catalog (Concluded)	Remarks	~	H on 27 H on 22 H on 26		H on 171, less H on 152,172	L on 172		H on 151	10r from FOF	L on 152			L on 72		L on 69	30r from EOF		L on 94	L on 93
Catalo	8		361 501 243		764	466	921	849	924	534	989		502	366	501	53	681	222	223
laviolet	×		831 733 320		291 255	322	424	484	510	549	953		504	465	449	569	370	629	899
SZUI FAI-UIU	R.A.	Cygnus (continued)	20:51:53 21:01:24 21:50:11	Aquarius	23:16:29	23:13:02	23:24:09	23:19:15	23:24:11	23:12:58	22:41:01	Grus	23:32:25	23:34:59	23:32:15	00:06:17	23:13:29	00:23:42	00:23:33
inines ili mie	SAO	Cygnus (c	50189 70837 51388	Aqua	146635 165651	146593	165696	165651	165696	146593	146273	Ğ	231675	231707	231675	231947	231522	215092	215092
Delisity vol	Approx. D/E		790 560 160		320	74	1480	2000	1500	40	25		45	140	75	91	118	14	32
Viailt	D/E		ннн		1 H	7 ·				- 1				T C				. r	
1	$\log D/E$		2.85 2.75 2.2		3.65	1.85	3.17	3.7	3.17	1.6	1.4		1.65	2.15	1.82	1.7	2.1	1.15	1.50
Table	Spec. Type		A2 A2 A3		A0 B3	A2	B8	B3	P88	A2	B9		A2	A2	A2	B8	A5	A3	A3
	V Mag		7.4 8.5 8.9		5.2	5.55	8.4	9.7	4.8	5.55	6.3		4.8	4.85	4.8	7.15	9.5	3.9	3.9
	Frame		28Ca ,,		150Li 151Li	152Li	171Li		172Li	:	,177Ca		69Li		72Ca	73Ca	:	93Ca	94Ca

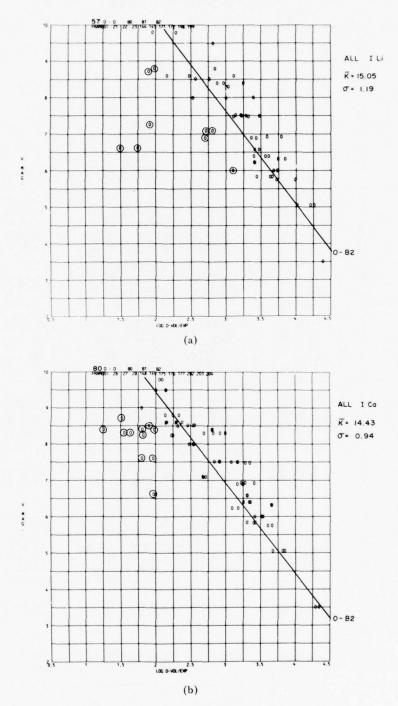
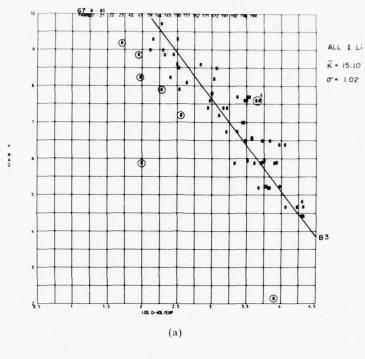


Fig. 16 — V magnitude as a function of log V/E, where E is the exposure in minutes, for SAO spectral types O, B0, B1, and B2. The solid line is the expected relationship V mag + 2.5 log V/E = K.



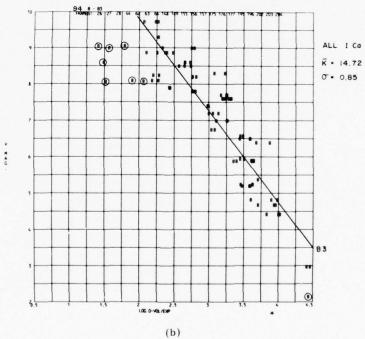


Fig. 17 — V magnitude as a function of log V/E for SAO spectral type B3

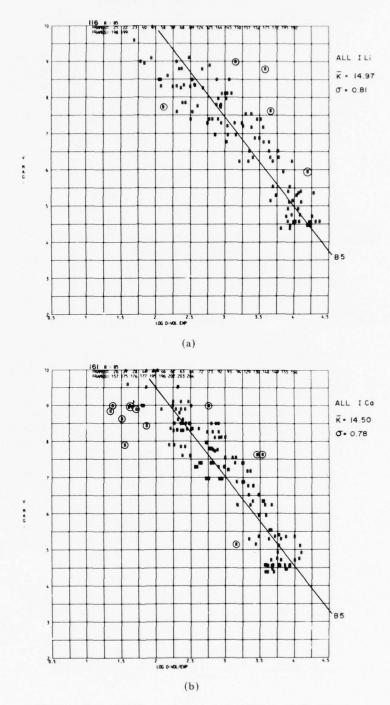
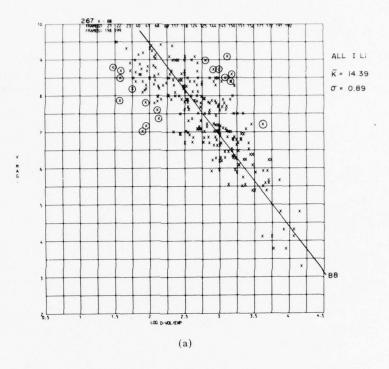


Fig. 18 — V magnitude as a function of log V/E for SAO spectral type B5



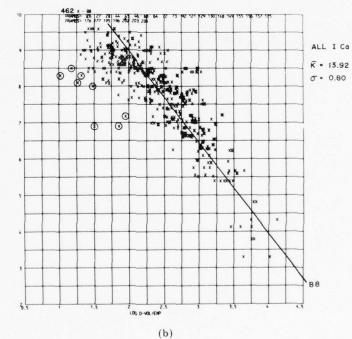
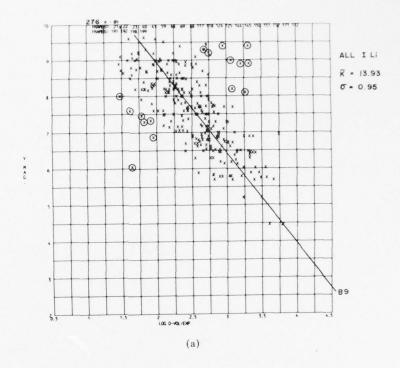


Fig. 19 - V magnitude as a function of log $\ensuremath{V/E}$ for SAO spectral type B8



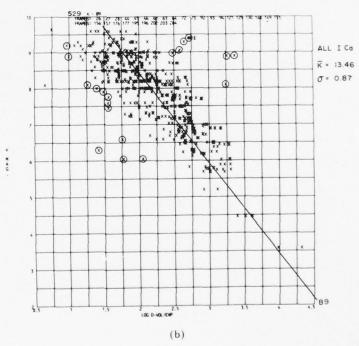
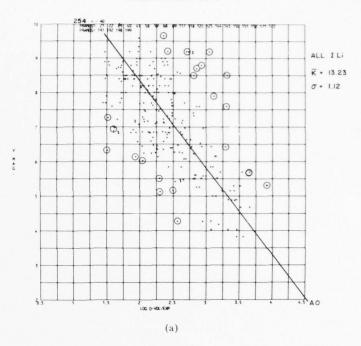


Fig. 20 - V magnitude as a function of log V/E for SAO spectral type B9 $\,$

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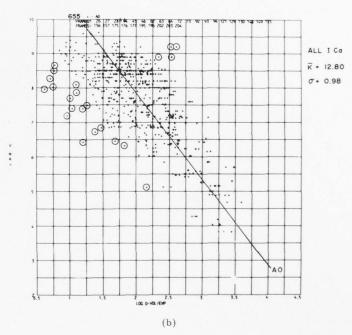
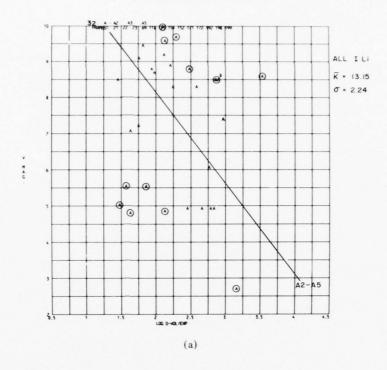


Fig. 21 - V magnitude as a function of log $\ensuremath{V/E}$ for SAO spectral type A0



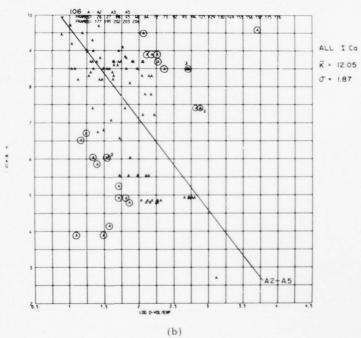
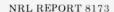


Fig. 22 - V magnitude as a function of log $\it V/E$ for SAO spectral types A2, A3, and A5



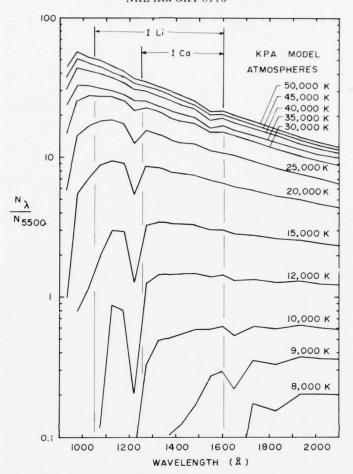


Fig. 23 — KPA model [13] predictions of photon flux vs wavelength, normalized to 5500 A

For the S201 camera at wavelength 1216 Å, preflight calibrations, confirmed by imagery of the hydrogen geocorona and the interplanetary Lyman- α background [2], yield a value b = 0.4D/photoelectron μ m². Hence the theoretical density volume V = 0.4n, with area expressed in μ m² and density as normally defined. However, with area expressed in number of pixels (33 μ m square) and density in PDS units (100 \times optical density),

V = 0.037n.

Thus a star image resulting from 1000 photoelectrons will yield a density volume V = 37.

Figure 23 shows plots of KPA model predictions of photon flux vs wavelength, normalized to the visual $(5500~\text{\AA})$, where a star of visual magnitude 7.6 yields a flux of 1 photon/cm² s Å [15], and Fig. 4 shows the effects of varying degrees of interstellar reddening on the 20,000-K-mod fluxes. Folding of these curves with the response functions in ILi and ICa modes (Fig. \$/ yields the curves of density volume/exposure for a star

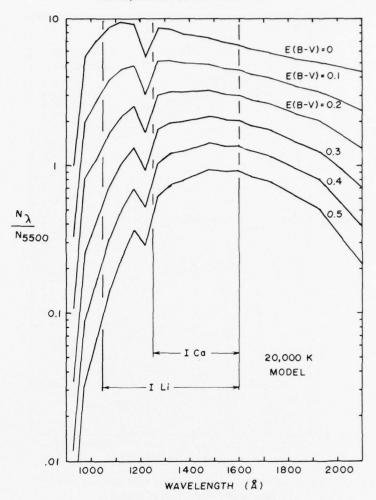
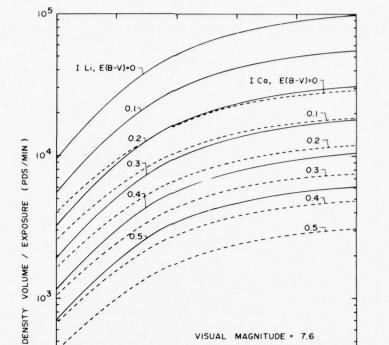


Fig. 24 — Effects of various degrees of interstellar reddening ("average" interstellar extinction law of Bless and Savage [14]) on the $20,\!000\text{-}K$ -model photon fluxes, normalized to 5500~Å

of visual magnitude 7.6 shown in Fig. 25, and the ratio ILi/ICa shown in Figs. 26 and 27. Figure 28 shows the computed stellar visual magnitude required to produce a density volume V=5131 for the various ILi and ICa exposures in relation to the unreddened model effective temperature T_e . This "standard" density volume corresponds to a conical image with peak density P=100 and a 7-raster diameter (N=38 pixels) and is by no means the weakest measurable image. Density volumes of 80 with P<75 and N=4 are measured reliably, although the corrected density volume V_c equals 290 (Table 3). That is, images 17.7 times fainter than this "standard" have been detected, measured, and recorded in the catalog. However, Fig. 29 shows the actual fractions of SAO stars detected in two fields (Cygnus and Norma) plotted against visual magnitude for various spectral types. They are seen to be about 3 magnitudes brighter than expected. For O-B2 stars ($T_e\approx20,000~K$) half are detected at visual magnitude 9.5; for A0 stars ($T_e\approx10,000$), 50% are detected at 7.8



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Fig. 25 — Ratio of density volume to exposure for a star of visual magnitude 7.6 as a function of effective temperature

T, (K)

102

20,000

VISUAL MAGNITUDE = 7.6

30,000

40,000

mag. For A2-A5 stars the detection fraction is erratic. The other 50%-detection magnitudes are given in Table 6.

Figures 30 through 32 give the theoretical relationship between density volume and visual magnitude for various effective temperatures and interstellar reddenings. These plots may be directly compared with the plots of visual magnitude vs $\log V/E$ in Figs. 16 through 22. Unfortunately, as apparent from these figures, it is not practical to separate the effects of temperature and of interstellar extinction using the far-ultraviolet imagery data alone; the effect of extinction is nearly equivalent to a decrease in effective temperature in the wavelength range covered by the ILi and ICa exposures. Only if the near-visual reddening and/or effective temperature is known from ground-based measurements can the far-ultraviolet fluxes be used to provide independent estimates of temperature and far-ultraviolet extinction. Comparison of our far-ultraviolet data and ground-based data is difficult because of the incompleteness and/or doubtful accuracy of the available ground-based data (spectral classification and UBV photometry) for stars in the visual magnitude range fainter than 7.0.

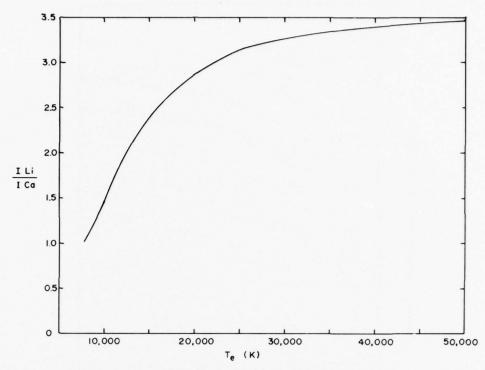


Fig. 26-Ratio ILi/ICa as a function of effective temperature

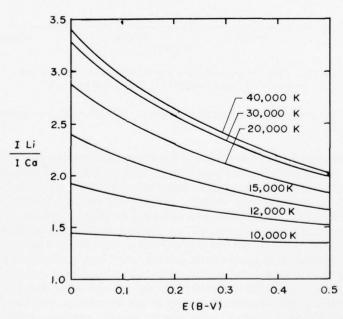


Fig. 27 — Ratio ILi/ICa as a function of interstellar reddening

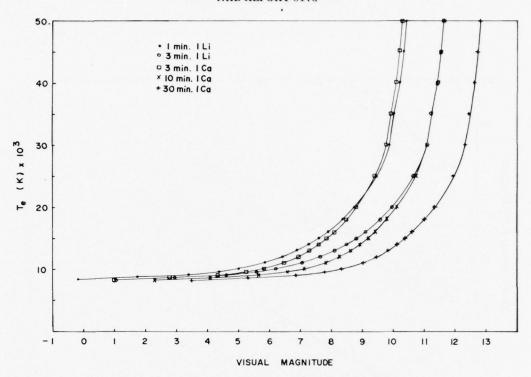


Fig. 28 — Computed stellar visual magnitude required to produce a density volume V = 5131 for various S201 exposures

THE CATALOG

The catalog is divided into 11 parts, each covering one field in the sky. Each part is headed by a constellation name and the field center coordinates α_0 and δ_0 . Two parts cover the Sagittarius field: one headed SGR NORMAL and the other headed SGR OVER-EXP (high background densities). The first column gives the object number. The next two columns give the scan coordinates x and y for each image detected, and the next two give the celestial coordinates R.A. (α 1950) in hr:min:s and DEC (δ 1950) in deg:arc-min:arc-s. The errors in position are less than about 3 arc-min.

Column 6 gives the star number in the SAO catalog (Smithsonian Astrophysical Observatory, 1966) within 5 arc-min of the detected image. If this SAO number is followed by a slash (/), the star is one of a pair or group too close to be resolved by the S201 camera; if by a query (?), the image is between 5 and 8 arc-min from the SAO star listed (considered a doubtful identification); and if by a colon (:), the star is one of two within 5 arc-min but is considered the less likely identification.

Columns 7 and 8 give the differences (measured image position minus SAO catalog position) in right ascension (α) and declination (δ). Columns 9, 10, 11 give spectral type and visual and photographic magnitudes from the SAO catalog.

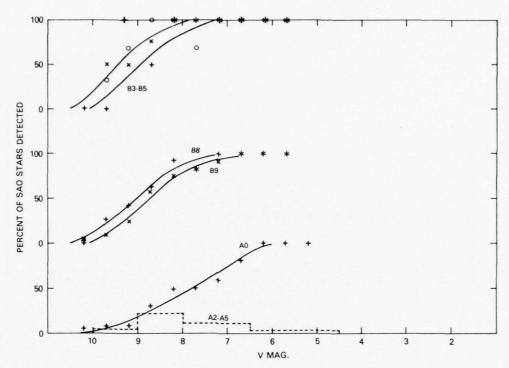


Fig.~29-Percent~of~SAO~stars~detected~in~Cygnus~and~Norma~as~a~function~of~visual~magnitude

Table 6 — Visual Magnitudes for 50% Detection on 3-min ILi or 4-10-min ICa in Cygnus and Norma Fields

Spectral Type	Approx. $T_e(K)$	No. of SAO Stars	Vis. Mag. for Actual 50% Detection	Expected Unreddened Visual Magnitude for V = 80 on 10-min ICa
O-B2	20000	21	9.5	9.7 + 3.1 = 12.8
B3-B5	16000	60	9.0	9.2 + 3.1 = 12.3
B8	14000	179	9.0	8.8 + 3.1 = 11.9
В9	12000	286	8.7	8.0 + 3.1 = 11.1
A0	10000	661	7.8	6.6 + 3.1 = 9.7

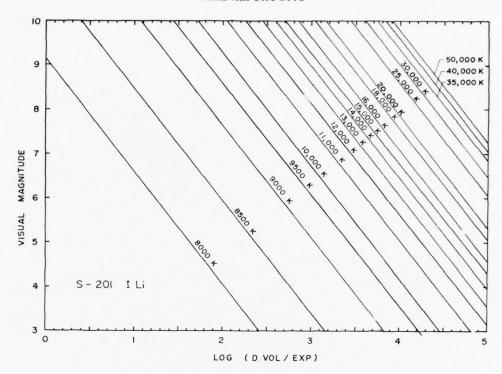


Fig. 30 — Theoretical ILi relationships between log $V\!/E$ and visual magnitude for various effective temperatures

Columns 12 to 17 concern the far-ultraviolet photometry based on a PDS-microdensitometer scan of each frame. Column 12 gives the peak density in units of 0.01D. The coordinates of this peak (x, y) are those given in columns 2 and 3. The S201 electrographic camera was fairly linear up to peak densities of 300 (3.0D) but was increasingly saturated at higher densities up to 510 (5.1D), the largest measured by the Boller and Chivens PDS microdensitometer. Column 13 gives the number of pixels more than 20 (0.2D) higher than the local background (BG) listed in column 14. The background (BG) was determined by an average of five pixels outside the star image (except for three frames noted in Table 1, where a 10- or 20-pixel average was used). A query (?) following the BG entry means that the computer value has been modified by inspection of the scan, where nearby images confused the computer average. A query follows the number of pixels when a large BG change was made or when there were other reasons to doubt the computer count of points in the image.

Column 15 lists the density volume of the image—the sum of density minus BG for all pixels inside the image "boundary," which are pixels such that the density was 20 (0.2D) above BG. Images less than four pixels in extent have been omitted. Column 16 lists the exposure in minutes and the filter type (L for LiF and C for CaF_2). Column 17 gives the ratio of the density volume to the exposure for easy comparison between frames of different exposure times. This ratio is the best estimate of the object's far-ultraviolet flux, although it has not been corrected for truncation, etc. These are upward corrections. The

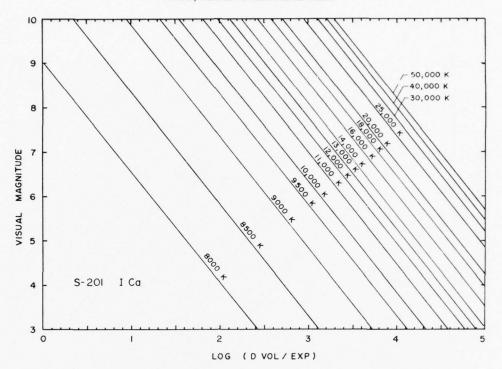


Fig. 31 — Theoretical ICa relationships for various effective temperatures

frame number from which these measurements were made is not listed but can be inferred from column 16 (EXP. & FILTER) and Table 1. For instance, in the Cygnus field, a 3.7-min exposure through CaF_2 is frame A28.

Symbols after the density-volume entries in column 15 have the following meanings: a query (?) means that the image was detected on one frame only (not confirmed by other frames covering the same field); an L means that the density volume is lower than expected from the spectral type and visual magnitude (columns 9 and 10), and H means that it is higher than expected. The H extries are therefore stars or associated nebulas with apparent far-ultraviolet excess; the NO entries are either nonstellar objects or stars too faint to have been included in the SAO catalog. These are all objects of special interest.

Table 2 is a list of the non-SAO (NO) objects in the S201 catalog, with some possible identifications in the RNGC [16]. The first two columns give the measured right ascension and declination converted to 1975 coordinates. The third column gives the frames on which each image was detected, and column 4 gives the measured ratio of density values and exposure, with separate values being listed for LiF-filter frames and ${\rm CaF}_2$ -filter frames. A blank in column 4 means no detection of an expected object (such as NGC1068 in the Cetus field). Column 5 gives the RNGC number of the possible identification (with queries following doubtful ones), and columns 6 and 7 give the RNGC 1975 coordinates. In extended nebulas, clusters, and galaxies, the S201 measured position (columns 1 and 2) might be affected by uneven far-ultraviolet flux distribution. Columns 8 and 9 give the magnitude and

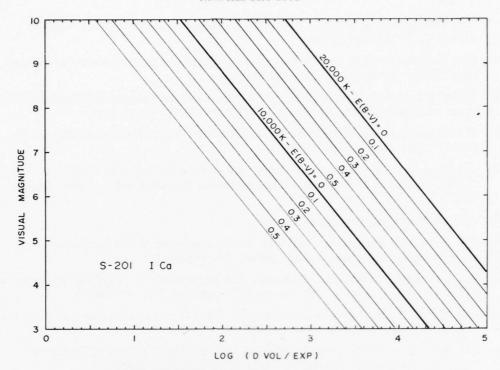


Fig. 32 — Theoretical ICa relationships for various instellar reddenings

type of the RNGC objects. In general, Table 2 omits objects in the Large Magellanic Cloud, which is the subject of another S201 study [10].

The S201 catalog is also available on a single reel of seven-track magnetic tape created by the Univac EXEC VIII system, Fortran formatted. Details are given in Appendix B.

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Appendix A

STAR DETECTION Program for EXEC II

The basic source of star data in this catalog was the STAR DETECTION program. It was required to pick out star images from the many anomalies present in the PDS-microdensitometer scan data. These included overlapping frame fields, density variations due to streaks in the S201-camera barrier membrane (Figs. 2 and 12d), photocathode sensitivity deviations, dust on the film, and some emulsion flaking.

Each frame scan was a square matrix of 1024 by 1024 density pixels, which extended beyond the circular field of view of the camera, approximately 1000 pixels (rasters) in diameter. The STAR DETECTION program processes each scan line by first looking for the edge of the field of view, where there is usually a density step of 30 units or more (Figs. 4b, 5b, ..., 13b). If the edge of field was not discernible (step less than 10 units), the program applies a fail-safe test: all pixels within 475 rasters of the center of the scan matrix are considered to be within the field of view. The program then examines each pixel in the field of view to determine whether it exceeds a threshold value above local background.

Thus STAR DETECTION is based on the assumption that the density gradient in a star image exceeds the density gradients caused by normal variations in the background and exceeds other anomalies like streaks due to the barrier membrane. The threshold value is under the control of the user and has generally been set to 20 units (0.2D). At first a 10-unit value was used for ILi frames, but this complicated the truncation correction, so the threshold was set to 20 units (0.2D) for all star detection used in this catalog.

The local background is computed by the formula

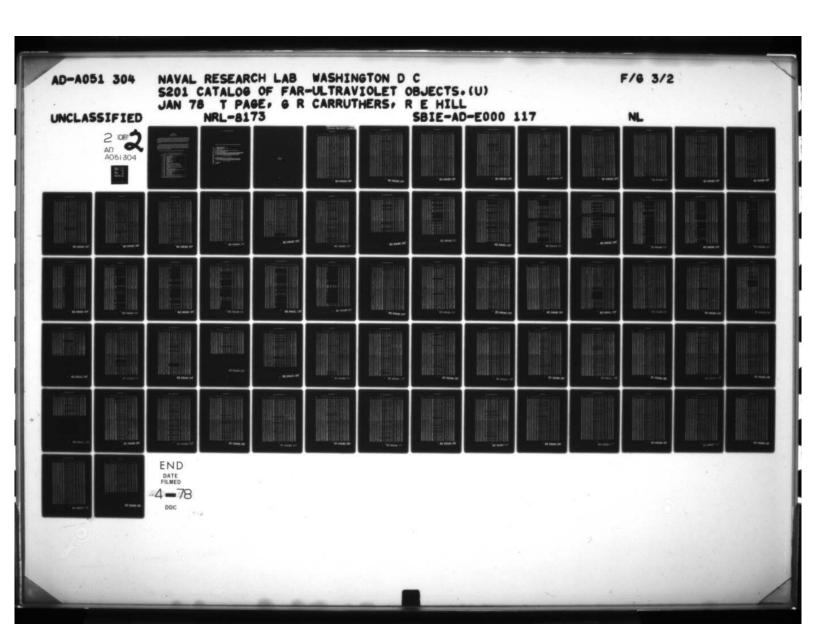
$$B_i = \frac{(n-1)B_{i-1} + D_i}{n} \,,$$

where B_i is the background density computed for the ith pixel, B_{i-1} is the background density computed for the previous, (i-1)th, pixel, n is a number specified by the user (usually n was set to 5, that is, BG in Table 1 is an average of five pixels), and D_i is the density of the ith pixel. If there is a step change in background density, this formula halves the error in the computed background B_i every n pixels. To keep the edge of a star image from affecting the background calculation, the pixel being tested for exceeding the threshold is always five pixels ahead of the pixel used in the background calculation. That is, B_i is applied to the (i+5)th pixel. Provisions were made for handling star images near or on the edge of the field by using stored densities from previous scan lines to calculate B_i .

Once a star edge has been detected, a record is kept of the sum of densities along the scan line which are greater than background plus threshold, the peak density value, the coordinates of the peak, and the background density B. The records of star images along two adjacent scan lines are maintained continuously. At the end of each scan line, the two lines are compared, and the densities are combined for each image that shows on both lines. If the peak density has increased from the previous line to the current line, the results

are brought forward to the current line. If the peak density has decreased, the results are placed in an output buffer and its location added to the current line so that additional data from succeeding lines can still be added. After the last scan line that detects the image edge, the data from the output buffer is listed, plotted, and placed on magnetic tape for further processing by the COORDINATE TRANSFORMATION program.

One problem was the effect of "noise" in the microdensitometer scans—localized high densities ("hot spots") within a star image. These hot spots would cause one large image to be recorded as several smaller images, which thwarted attempts to separate close, "double-star" images. These adverse effects of hot spots were reduced by preprocessing the scan data with the SMOOTH program. In addition the STAR DETECTION program was modified to automatically combine two peaks 3 rasters apart and to establish a "sphere of influence" of an image by measuring the diameter of the image (assumed to be circular) on the scan line through the peak. Other peaks within half this diameter from the first peak were combined with it unless the minimum density between them differed from the average peak density by more than a value specified by the user (usually 100 units). This modification may have helped resolve a few pairs of close images in the catalog.





Appendix B

S201 Catalog Tape

The S201 catalog of far-ultraviolet objects is available on a seven-track 800-bit-per-inch odd-parity tape. The tape was written on a Univac 1110 computer under the EXEC VIII operating system using Fortran-formatted write statements. Thus the file structure is of the Univac SDF sequential formatted record type. A more detailed description of this format can be found in the Sperry Univac 1100 Series Fortran V Library Programmer Reference (UP-7876).

There are 11 data files on the tape, and each data file is terminated by a software end-of-file mark and a hardware end-of-file mark. The data are in the field-data character set (see Univac 1100 Operating System UP-4144 Rev. 3, Appendix D) of 132 characters (22 words) per data line. The first data line of each file is a header line containing an alphanumeric description of the target field. Each succeeding line consists of 132 characters, the meanings of which are given in Table B1.

A listing of a Fortran program to extract the data is given in Table B2.

Table B1 — Meanings of Characters in Each Data Line

Characters	Meaning (digits right-justified)
1- 6	Object number
7- 12	x raster coordinate
13- 18	y raster coordinate
19- 23	Hours of right ascension (R.A.)
24	Separator (:)
25- 26	Minutes of R.A.
27	Separator (:)
28- 29	Seconds of R.A.
30- 34	Degrees of declination (DEC.)
35	Separator (:)
36- 37	Arc-minutes of DEC.
38	Separator (:)
39- 40	Arc-seconds of DEC.
41- 43	Blank
44- 49	SAO star number, or NO, or blank
50	Query (?) or colon (:) or slash (/) or blank
51- 55	Minutes in deviation of R.A. from SAO star
56	Separator (:)
57- 58	Seconds in deviation of R.A. from SAO star
59- 63	Arc-minutes in deviation of DEC, from SAO star
64	Separator (:)
65- 66	Arc-seconds in deviation of DEC, from SAO star
67- 69	Blank
70- 71	Spectral type of SAO star
72- 78	Visual magnitude of SAO star
79- 85	Photographic magnitude of SAO star (zeros = unknown)
86- 91	Peak density of the image
92- 99	Total number of points in the image
100	Query or blank
101-105	Local background density
106	Query or blank
107-114	Density volume of image
115	Query or blank
116	H or L or blank
117-121	Exposure time rounded off to tenths of minutes
122	Filter type (L or C)
123-132	Density volume divided by exposure time*

^{*}For an image near the edge of the field, the letters ED replace the numerals for hundredths and thousandths (characters 131 and 132).

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| Company | Comp
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S201 Catalog Listing

Preceding Page BLank - NOT FILMED

NRL REPORT 8173

			CYGNI	US RA 21:24	DEC +37:30)								
OBJECT NO.	x	Y	R.A.	DEC.	SAO NO.	R.A.	OEC.	SPEC .	WAG.	MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EXP. DEN. VOLV
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97

BEST AVAILABLE COPY

			CYGN	US RA 21:24	DEC +37:30)								
OBJECT NO.	x	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC .	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.8 DEN. VOL/ VOLUME FILTER EXP.
NO. 10123 1045 1067 1089 1101 11123 1145 1167 1189 1201 1223 1245 1267 1289 1331 1333 1345 1367 1389 1441 144 144 144 144 144 144 144 144 1	865 877 875 888 873 888 873 888 873 889 881 881 881 881 883 883 884 885 885 885 885 885 885 885	591 590 806 304 566 619 776 610 619 619 619 619 619 619 619 619	R. A. 20:45:35 20:45:35 20:45:53 20:45:55 20:45:55 20:45:55 20:45:55 20:45:55 20:46:39 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:43 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:46:56 20:47:11 20:47:11 20:47:11 20:47:11 20:47:16 20:47	36:17:21 36:17:49 36:17:49 36:17:49 36:17:49 36:17:49 36:47:35 31:56:52 41:56:52 41:56:52 41:56:52 41:56:52 41:56:52 35:43:33 35:553:49 35:43:33 35:553:49 35:43:33 35:553:49 35:43:33 35:553:49 36:40:21 42:49:26 36:49:26 36:49:26 36:49:26 36:49:26 36:49:49:26 36:49:49:26 36:49:49:26 36:49:49:26 36:49:49:26 36:49:49:26 36:49:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:55:58 36:49:49:49 36:57:58 36:49:49:49 36:57:58 36:49:49:49 36:57:58 36:49:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49 36:49:49	70505 70505 70505 70505 70505 70510 70513 70514 50066 500717 70527 70539 70539 70539 70539 70539 70539 70530	A. A. 9022220561455884 B. 980990994588802 20566 MANNI 4881445550071688990010000000000000000000000000000000	0EC1:17 -0:355 -6:12 -0:436 -1:17 0:436	TYPE	MAG. 41,420 9,500 10,700 10,100 10	MAG000 .000 .000 .9 +00 .00 .00 .00 .00 .00 .00 .00 .00 .00	0EN. 4333 4533 4533 459 4616 67 5543 1011 5510 756 551 174 883 1015 157 1883 1015 175 1883 1015 175 177 1883 1015 177 1883 1015 177 1883 1015 177 1883 1015 177 1883 1015 177 1883 1015 177 1883 1015 1015 1015 1015 1015 1015 1015 101	PÓINTS 3455 21 18 8 6 7 35 7 11 25 7 31 6 32 23 3 2 2 3 6 3 3 6 3 4 2 4 5 3 6 5 2 6 3 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 3 7 2 6 6 7 2 6 7	201-5552182772487253772883153439026641226698257566238188592153360786544416688449189218255218277248725122659271826444182668844918921825521825221825221825221825221825221825221825221825221825221825221825221825221825221825222182522222222	28034 L 3.7C 7676.757
172 173 174 175 176 177 178 179 180 181	836 831 837 839 839 852 826 831 831	682 789 529 487 537 460 193 654 647 647	20:50:13 20:50:14 20:50:16 20:50:16 20:50:17 20:50:28 20:50:32 20:50:32 20:50:32	34:26:48 32:23:25: 37:20:55 38:11:5 37:19:37 38:43:41 44:16:55 34:59:16 34:59:16 34:59:16 35:0:29	70599 70619? 70606 70608 50153 70603 70603? 70623? 70603	0: 31 0: 0 0: 2 0: 2 0: 4 0:20 0:21	-1:20 7:26 1:6 -0:12 0:24 2:11 -2:20 -2:12 -9:35 -0:59	85	6.90 9.00 8.70 8.70 8.90 8.50 8.80 8.80 8.80	9.50 8.60 8.60 9.30 8.90 9.30 9.30 8.80 9.30	305 50 88 55 44 55 167 163 83 83	73 12 29 9 8 10 7 4 23 26	19 18 19 21 16 20 133 140 27 27	6799 3.7C 1837.568 3162 3.7C 85.405 1142 H 10.0C 114.200 2437 10.0C 24.300 192 3.7C 51.892 276 10.0C 27.600 179 L 3.0L 59.667 81 3.0L 27.000 789 10.0C 78.900 789 10.0C 78.900 146 3.7C 39.459
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	CYONUS RA 21:24 DEC +37:30													
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	A.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
301 302 303 305 307 306 307 307 308 309 309 311 311 311 311 311 311 311 31	7933 7957 7957 7957 7957 7957 7957 7957	3394 4 4 6 8 1 3 4 7 7 8 9 6 7 8 9 9 9 9	19 19 19 19 19 19 19 19 19 19 19 19 19 1	66614115915995975779959759759759759759759759759759	502717 502714 502717 70271 702	506-153221 26306633230113 2 0 2 757 22 9182211652 151383111110105669231313811 7 096326261 124444320005	-0:4505 -1:492 -0:599 -0:550 -	A A B B B B B B B B B B B B B B B B B B	8.4.00 9.5000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.50000 9.500000 9.50000 9.50000 9.500000 9.500000000 9.5000000000000000000000000000000000000	8.80 9.30 9.30 000 000 000 000 000 000 000	388 8407 417 117 118 338 8407 117 118 338 8407 17 466 8410 2 18 64 8410 2 18 65 841	1119995538262697397513065656998489505589536110144655877777233189716567891999798833952069067	22200243899669532146971962108899906786155568847286887372809888491724049153556888996835588200849075447174	6605 3.0L 2201.667 14719 10.0C 1471.900 14719 10.0C 1471.900 1338 10.0C 33.800 1248 10.0C 33.800 1248 13.0C 407.801 14719 1.0.C 1471.900 1388 10.0C 407.801 1518 3.7C 402.432 1518 3.7C 402.432 1518 1.0.C 407.801 1519 1.0.C 2052.333 3691 1.0.C 2052.333 3691 1.0.C 2052.333 3691 1.0.C 2052.333 1501 1.0.C 1599.900 15099 10.0C 13.600 1386 1.0.L 128.000 1481 1.0.L

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CYGNUS RA 21:24 DEC +37:30															
OBJECT NO.	×	Y	R.	Α.	DEC.	SAO NO.	R.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. DEN. VOL/ VOLUME FILTER EXP.
401	700 756	139	21:	1:44	45:10:30 45:10:1	50404 50404	-0: 7 -0: 2	0:22	AO AO	8.00	7.90 7.90	52 155	17	14	491 H 3.00 163.667 369 3.0L 123.000
403	756 759	136	21:	1:50	45:11: 8 45:10:54	50404 50404	-0: 2	1: 1	AO	8.00	7.90	158	54	24	2730 H 10.0C 273.000
405	764	93	51:	2: 5	46:10: 9	50411	-0: 4	2:17	88 88	8.50	7.70	141	24 64	55	3711 H 3.7C 1002.973
406 407	704 764	90	21:	2: 6	46: 9:46 46: 9:53	50411	-0: 3 -0: 0	2: 1	88	8.50	7.70	119	58 29	19	2935 H 3.00 978.333 912 H 1.0L 912.000
408	761 760	98	21:		46: 9: 5 46:10:26	50411 50411	0: 2	1:13	88	8.50	7.70	302	116	36	9874 H 10.0C 987.400 3750 H 3.0L 1250.000
410	717	593 436	21:	5:50	35:57:58	70861	0: 1	0:59	AO	8.90	8.90	66	10	50	331 10.0C 33.100
412	726	293	21:	2:40	39:15:31	70874?	-0:33 -0:16	6:10	A2	8.60	9.70	199	8	136?	350? 3.0L 116.667 117 .2L 468.000
413	725	353 393	21:		40:49:54 40: 9: 7	50426/	-0: 0 0: 3	1:25	A AO	8.40	8.20	54	10	18	269 10.00 26.900 153 3.70 41.351
415 416	723	393 386		3:10	40: 9: 7 40: 9:30	50428/	-0: 6	-3:51		8.70	9.20	48	6	16	153 3.70 41.351
417	720	386	21:	3:13	40: 9:30	50428?	0: 1	-3:29	AO	8.60	9.20	79 79	17	19	631 10.00 63.100 631 10.00 63.100
418	701 699	734	21:	3:19	33:17:24 33:17:46	70886 70886	0: 3 0: 3	-0:16 0:6	0A 0A	8.00	8.00	84	8	21	199 L 3.7C 53 784 804 10.0C 80.400
420 421	697 704	666 667	21:		34:37:36 34:37:41	70888 70881?	-0: 3 0:14	0:55 8:53	AO	7.90	9.30	164	5	139	97 L 3.0L 32.333 125 3.7C 33.784
422	704	667 660	21:	3:24	34:37:41 34:36:47	70888 70881?	-0:50	0:60 7:58	AD	7.90	9.30	46 81	17	16	125 L 3.7C 33.784
424	702	660	21:	3:29	34:36:47	70888	0: 4	0: 5	AO	7.90	8.00	81	17	21	618 10.0C 61.800
426	689	833 834	21:	3:38 3:40	31:20:42	70892 70892	0: 0 0: 3	-1:13 -0:59		8.40	8.70 8.70	167	15	127	470 3.0L 156.667 595 3.7C 160.811
427 428	673 631	830	21:		43:33:53	70892	0: 3	-1:20		8.40	8.70	52 50	10	16	280? 3.0C 93.333 340 3.0C 113.333
429 430	687 683	827 868	21:	3:42	31:19:60	70892 70894	0: 5	-1:54 -2:50		8.40	8.70	119	40 16	53	2006 10.00 200.600
431	740 711	160	21:	3:46	44:50:23	,003,	0. 5	2.50		6.50	0.00	70	16	16	597? 3.70 161.351
433	700	427 579	21:	4: 9	39:18:49 36:13:21	70907	0: 3	0: 1	AO	8.80	9.30	50	6 7	18	158? 10.0C 15.800 179 L 10.0C 17.900
434	695 697	563 554	21:	4:20 4:34	36:40:25	70936 70936	-0:53 -0:38	-4:28 -1:31	AO AO	8.00	8.00	167	10	21	188 3.0L 62.667 330 L 10.0C 33.000
436 437	685	660 661	21:	4:37 4:38	34:42:60	70921	-0: 6 -0: 5	0:33	89 89	8.30	8.50	201	13	141	485 3.0L 161.667 589 3.7C 159.189
438 439	690 633	654 658	21:	4:44	34:43:34	70921 70921	0: 2	1: 7	89	8.30	8.50	147	32	20	1860 10.0C 186.000
440	670	885	21:	4:60	30:20:17	70931	-0: 2	-3:55	89 89	8.30 7.51	8.50	189	69	19	401 3.0C 133.667 4633 H 3.7C 1252.162
441	667 661	881	21:	5: 1 5: 1	30:20:55	70931 70931	-0: 1 -0: 0	-2:45 -2:35	88	7.51	.00	293	71	126	1877 H 1.0L 1877.000 4949 H 3.0L 1649.667
444	661 668	883 878		5: 1 5: 2	30:21: 4	70943? 70931	-0:20 0:1	-6:38 -4:18	A5 88	8.90 7.51	8.49	293 343	71 108	156	4949 H 3.0L 1649.667 11300 H 10.0C 1130.000
445	668	878 881		5: 2 5: 6	30:19:22	70943? 70931	-0:19 0:4	-8:21 -3:50	A5 88	8.90 7.51	8.49	343 160	108	22	11300 H 10.0C 1130.000 3674 H 3.0C 1224.667
447	611	881	21:	5: 6 5: 9	30:19:49 38: 7: 5	70943? 70935	-0:15 -0:1	-7:53 0:18	A5	8.90	8.49 7.80	160	59	19	3674 H 3.0C 1224.667
449	683	690	21:	5:11	34: 0:32	70925?	0:27	4:40	A2	8.00	.00	55	7	50	200 10.00 20.000
450	683 687	690 558	21:		34: 0:32 36:46: 8	70 934 70 936	0: 1	0:56	AO	9.00	9.50	55 196	7 15 7	140	200 10.0C 20.000 507 H 3.0L 169.000
452 453	675 695	780 485	21:	5:13	32:17:57 38: 7:31	70940 70935	0: 3	-0: 3 0:43	89 A0	7.50 8.50	7.90	94 85	17	19	179 L 1.0L 179.000 670 10.0C 67.000
454 455	691 693	552 559	21:	5:13	36:45:31 36:46:18	70936 70936	-0: 0	0:38	AO AO	8.00	8.00	141	32 15	21	1626 10.0C 162.60C 512 3.7C 138.378
456 457	635 669	555 782	21:	5:15 5:16	36:46:24 32:18: 6	70936 70940	0: 2	1:31	A0 89	8.00 7.50	8.00	59 208	26	14	298 3.0C 99.333 1129 H 3.0L 376.333
458	677	784	21:	5:16	32:18:28	70940	0: 1	0:28	89	7.50	7.90	110	25	19	1224 3.70 330.811
459 460	619 675	780 777	21:	5:17 5:17	32:18:14	70940 70940	0: 1	0:14	89 89	7.50	7.90	203	22	23	898 3.0C 299.333 3405 10.0C 340.500
461	699 719	401 177	21:		39:49:35	70928 50468	0:25	-1:42 -0:57	A 3 B9	8.50 7.70	8.50 7.10	212	40	155	111 10.0C 11.100 1936 H 3.0L 645.333
463 464	720 723	171		5:24 5:25	44:27:39 44:26:55	50468 50468	-0: 2 -0: 1	-0:39	B9	7.70	7.10	269 94	67 15	22 56	5589 H 10.0C 558.900 438 1.0L 438.000
465	731	114	21:	5:25	45:42:59	50473	-0: 7 -0: 1	-0:38	AO	8.70	8.40	48	7	21	170 3.70 45.946
466 467	723 663	178	21:	5:25 5:26	44:28:33 44:27:57	50468 50468	-0: 0	-0:15	89 89	7.70	7.10	137	38 35	14	1702 H 3.0C 567.333
468 469	728	853 107	21:	5:26 5:31	30:48:54 45:43:14	70944 50473	0: 2	-1:41	AO	9.00	9.00	67 92	38	20 25	742 10.00 74.200 1522 H 10.00 152.200
470 471	728 675	112		5:33 5:47	45:44:12	50473 70953	0: 0	0:35 1:32	A0 B0	8.70 7.50	7.60	303	63	119	137 3.0L 45.667 5682 3.7C 1535.676
472 473	665 673	738 734		5:49 5:51	33:13: 6 33:12:37	70953 70953	-0: 0	1:25	80	7.50	7.60	71 259	14	27 64	432 .21 1728.000 3091 1.0L 3091.000
474 475	673 667	731 736	21:	5:53 5:55	33:11: 5 33:12:43	70953 70953	0: 2	-0:35 1:3	B0	7.50	7.60	395 385	117 67	137	12371 10.0C 1237.100 5960 3.0L 1986.667
476	717	156	21:	5:57	44:44:49	50480	-0: 2	-0:52	AO	7.20	7.20	66	17	21	552 L 10.0C 55.200
477 478	616 677	632	21:		33:12:55 35: 9: 6	70953 70962	0: 8	1:15	80 A0	7.50 8.70	7.60 8.50	267 66	12	25	4562 3.nc 1520.667 372 10.0C 37.200
479 480	656 682	893 582	21:	6:13 6:16	30: 9:25 36:17:53	70968?	-0:19	9:15	AO	5.70	.00	58	8	17	201?L 3.7C 54.324 2:7? 3.7C 58.649
481	652 651	904 897	21:		29:56:50 29:57:10	70968 70968	-0: 5	-3:20 -2:59	AO AO	5.70	.00	355	111	20	23206 H 10.0C 2320.600
483 484	641	905	21:	6:31	29:56:35 29:57:17	70968 70966	-0: 1 0: 1	-3:35 -2:53	AO AO	5.70	.00	60	16 70	61	418 .2L 1672.000 4640 H 1.0L 4640.000
485	643 594	905	21:	6:33	29:57:23	70968 70968	0: 1	-2:47	AO	5.70	.00	398 317	110	156	10714 H 3.0L 3571.333 9138 H 3.0C 3046.000
486 487	696	900 331	21:	6:35	29:56:23	50488	0: 5	-3:47 -0:10	A0 B9	8.30	8.00	60	9	15	284 3.70 76.757
488 489	691 693	330 324	21:	6:37	41:22:37	50488 50488	0: 4	0:16	89	8.30	8.00	167	55	130	285 3.0L 95.000 989 10.0C 98.900
490 491	661 666	788 719	21:	6:37 6:39	32: 4:10 33:25:37	70957? 70971	0:31	8:53	AO AO	8.60	8.90 7.90	56 47	11	50	317? 10.0C 31.700 94 L 10.0C 9.400
492	637	327 683	21:	6:43	41:24:25	50488	0:10	1:25	89	8.30	8.00	50 52	6	15	160 3.0C 53.333 99? 3.0C 33.000
494	705 705	217	21:	6:47	43:36:21 43:36:47	50491 50491	-0: 3	-1:12	AO AO	8.20	7.60	85 103	6	58	137 1.0L 137.000 1023 H 3.7C 276.486
496	702	213	21:	6:48	43:37:11	50491	-0: 5	-0:21	AO	8.20	7.60	196	38	26	2736 H 10.0C 273.600
497 498	701 646	219	21:	6:49 6:49	43:36:39 43:37:20	50491 50491	-0: 1 -0: 1	-0:53 -0:13	A0 A0	8.50	7.60	188	19	15	757 H 3.0C 252.333
499 500	681 676	395 517	21:	7: 4	40: 2:59 37:27:17	70980?	-0:14	-7:36	42	8.80	8.60	167	6	139	142 3.0L 47.333 139?L 10.0C 13.900

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			CYGNE	JS RA 21:24	DEC +37:30									
OBJECT NO.	x	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC . TYPE	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
501 502 503 504	676 686 683 681	517 396 389 382	21: 7: 4 21: 7: 5 21: 7: 8 21: 7:30	37:27:17 40: 3:13 40: 3:42 40:12:18	70981? NO NO	-0:15	6:48		9.30	9.90	55 48 86 55	5 6 19	24 18 19	1397 10.0C 13.900 143 3.7C 38.649 717 10.0C 71.700 1772 10.0C 17.700
505 506 507	714 711 651	85 120 119	21: 7:33 21: 7:39 21: 7:39	46: 8:17 45:30:18 45:31:26	50503 50510 50510	0: 6 -0: 8 -0: 9	1: 7 -1:46 -0:38	85 85	8.70 7.40 7.40	9.00 7.60 7.60	60 91 107	6 18 24 40	20 28 57	177? 10.0C 17.700 456 10.0C 45.600 614 1.0L 614.000 1897 3.0C 632.333
508 509 510	707 707 689	588 155 119	21: 7:43 21: 7:44 21: 7:44	45:31:7 45:31:50 42:13:39	50510 50510 50509	-0: 4 -0: 3 -0: 2	-0:57 -0:14 -0:7	85 85 A0	7.40 7.40 7.90	7.60 7.60 7.70	264 217 61	74 51 10	32 126 17	6399 10.00 539.900 2460 3.0L 820.000 293 3.70 79.189
511 512 513 514	686 710 662 657	282 123 627 629	21: 7:45 21: 7:45 21: 7:46 21: 7:46	42:12:51 45:31:59 35:18:13 35:18:20	50509 50510 70994 70994	-0: 1 -0: 3 -0: 5 -0: 5	-0:55 -0:5 0:58 1:5	85 85	7.90 7.40 8.70 8.70	7.70 7.60 8.70 8.70	110 135 137 284	24 46 15 34	21 20 72 143	1078 10.00 107.800 2554 3.70 690.270 575 1.0L 575.000 2013 H 3.0L 671.000
515 516 517	671 671 657	482 482 682	21: 7:48 21: 7:48 21: 7:51	38: 9:45 38: 9:45 34:12:38	70990 71000? 70998	0: 3 -0:13 -0: 7	1: 3 7: 4 0:29	A2	9.10 8.60 8.70	9.30 8.20 8.70	48 48 104	5 5 8	19 19 68	124 10.0C 12.400 124 10.0C 12.400 227 1.0L 227.000
518 519 520 521	665 661 663 630	566 624 631 285	21: 7:51 21: 7:51 21: 7:51 21: 7:52	36:27:26 35:18: 3 35:17:30 42:14: 1	70994 70994 50509	-0: 1 -0: 0 0: 6	0:48 0:15 0:15	A0	8.70 8.70 7.90	8.70 8.70 7.70	53 267 137 48	5 59 30 6	23 18 16	122? 10.0C 12.200 4417 H 10.0C 441.700 1562 H 3.7C 422.162 157 3.0C 52.333
522 523 524	605 651 711	627 684 82	21: 7:53 21: 7:56 21: 7:56	35:18:47 34:12:39 46:10:34	70994 70998 50503?	0:58 0:1	1:31 0:30 3:25	-	8.70 8.70 8.70	8.70 8.70 9.00	131 223 72	25 22 34	17 142 24	1239 H 3.0C 413.000 972 H 3.0L 324.000 1136? 10.0C 113.600
525 526 527 528	656 655 658 600	678 697 685 681	21: 7:58 21: 7:58 21: 7:58 21: 7:59	34:13:42 33:51: 3 34:13:11 34:14:23	70998 70999 70998 70998	-0: 0 -0: 1 -0: 0 0: 1	1:34	A 0	8.70 8.90 8.70 8.70	8.70 9.30 8.70 8.70	186 73 97 86	41 16 19	25 20 18 17	2545 10.0C 254.500 566 10.0C 56.600 835 3.7C 225.676 624 3.0C 208.000
529 530 531	668 649 649	487 691	21: 8: 5 21: 8: 6 21: 8: 6	38: 3:15 34: 4:58 34: 4:58	71000 70998? 71005	0: 4	0:34 ~7:11 1:27	5A 0A	8.60 6.70 8.90	8.20 8.70 8.60	85 176 176	15	27 144 144	502 10.0C 50.200 171 3.0L 57.000 171 3.0L 57.000
532 533 534	701 701	136	21: 8: 7 21: 8: 7 21: 8: 7	45:17: 2 45:16:43 45:16:43	50521 50521 50531?	-0: 4 -0: 4 -0:24	-0:51 -1:10 -4:37	85 85 89	6.52 6.52 8.40	.00 .00 8.40	61 417 417	20 151 151	138	584 .2L 2336.000 13331 3.0L 4443.667 13331 3.0L 4443.667
535 536 537 538	654 654 705 705	685 685 135 135	21: 8: 8 21: 8: 8 21: 8: 8	34: 4:47 34: 4:47 45:16:55 45:16:55	70998? 71005 50521 50531?	0:10 0:1 -0:3 -0:23	-7:22 1:16 -0:58 -4:25	A0 85 89	8.70 8.90 6.52 8.40	8.70 8.60 .00 8.40	1 08 1 08 380 380	31 31 107 107	24 24 29? 29?	1287 10.00 128.700 1287 H 10.00 128.700 11574 3.70 -216 11574 3.70 3124.216
539 540 541 542	656 656 598 598	692 692	21: 8: 8 21: 8: 9	34: 5:30 34: 5:30 34: 6:42 34: 6:42	70998? 71005 70998? 71005	0:10 0:1 0:11	-6:39 1:59 -5:27	AO	9.70 8.90 8.70	8.70 8.60 8.70	60 60 50	10 10 7	18 18 15	307 3.7C 82.973 307 3.7C 82.973 196 3.0C 65.333
543 544 545	705 645 701	132	21: 8: 9 21: 8:10 21: 8:10 21: 8:14	45:16:23 45:17:30 45:17:14	50521 50521 50521	0: 2 -0: 1 -0: 1 0: 3	3:11 -1:30 -0:23 -0:39	85 85 85	8.90 6.52 6.52 6.52	8.60 .00 .00	50 247 350 432	89 97 165	15 60 26 37	196 3.0C 65.333 6008 H 1.0L 6008.000 9342 H 3.0C 3114.000 22353 10.0C 2235.300
546 547 548	701 642 690	738 205	21: 8:14 21: 8:18 21: 8:20	45:17:14 33: 8:11 43:45: 7	50531? NO 50525?	0: 6	-4: 6 -1:60	B9 A0	8.40	8.40	432 161 76	165 5 16	37 134 25	22353 H 10.0C 2235.300 113 3.0L 37.667 553 L 10.0C 55.300
549 550 551 552	690 648 653 626	205 733 589 924	21: 8:23 21: 8:33 21: 8:33	43:45: 7 33: 8: 1 36: 5:40 29:23:18	50529? 71011 89506?	-0: 4 0: 7 0: 3	-2:28 -2:30 -5:38	0A SA	9.10 8.80	9.40	76 74 175 50	16 19 4 13	25 19 143 22	553 L 10.0C 55.300 665? 10.0C 66.500 104 3.0L 34.667 317 10.0C 31.700
553 554 555	666 666 671	456 456 375	21: 8:39 21: 8:39 21: 8:39	38:44:41 38:44:41 40:20:25	71013? 71018 50532	0: 9 -0: 3 0: 6	5:46 -0:43 0:51	B3 B9	9.30 7.40 8.50	9.80 7.40 9.10	191 191 70	29 29 11	67 67 23	1694 1.0L 1694.000 1694 1.0L 1694.000 345 L 10.0C 34.500
556 557 558 559	658 667 664	509 459 459 510	21: 8:40 21: 8:40 21: 8:40 21: 8:40	37:42:53 38:45:15 38:45:15 37:43:21	71017 71013? 71018 71017	0: 0 -0: 2 0: 0	0:13 6:20 -0:9 0:42	83 A0	8.50 9.30 7.40 8.50	7.90 9.80 7.40 7.90	234 234 60	7 48 48 10	139 18 18	195 3.0L 65.000 3685 3.7C 995.946 3685 L 3.7C 995.946 305 3.7C 82.432
560 561 562	661 661 658	458 458 460	21: 8:42 21: 8:42 21: 8:43	38:46: 2 38:46: 2 38:46:22	71013? 71018 71018	0:12 0:1 0:2	7: 7 0:38 0:58	83	9.30 7.40 7.40	9.80 7.40 7.40	356 356 62	64 64 8	137 137 25	4492 3.0L 1497.333 4492 3.0L 1497.333 226 .2L 904.000
563 564 565 566	661 605 608	503 513 455	21: 8:43 21: 8:44 21: 8:46 21: 8:48	38:45:46 37:43:52 37:37: 9 38:47:55	71018 71017 71017 71018	0: 2 0: 5 0: 6	0:22 1:13 -5:31 2:31	B3 A0 A0 B3	7.40 9.50 8.50 7.40	7.40 7.90 7.90 7.40	365 109 37 209	127	21 22 15	9897 10.0C 989.700 1013 10.0C 101.300 85 3.0C 28.333 3042 3.0C 1014.000
567 568 569	605 646 660	506 722 488	21: 8:48 21: 8:52 21: 8:56	37:44:42 33:28:28 38: 2:41	71017	0: 8	1:56	AO AO	8.50 8.70	7.90 8.70	50 45	6 4 4	20 20	164 3.0C 54.667 101? 3.7C 27.297 97 L 10.0C 9.700
570 571 572 573	655 663 653 648	590 468 587 589	21: 9: 1 21: 9: 2 21: 9: 3 21: 9: 4	36: 5:51 38:34:53 36: 5:10 36: 6:30	71032 71030 71032 71032	0: 2 0: 3 0: 0 0: 1	0:12 0:25 -0:28 0:51	81 83 81	6.40 6.40	8.60 .00	331 41 309 403	94 52 99	21 17 68 143	8286 L 3.7C 2239.459 89 L 3.7C 24.054 4203 l.0L 4203.000 7676 L 3.0L 2558.667
574 575 576	644 645 652	720 591 583	21: 9: 5 21: 9: 7 21: 9: 7	33:30:48 36: 6:50 36: 6:22	71032	0: 4	1:12	B1	6.40	.00	112 409	15 21 180	50 50	532? 3.7C 143.784 939 .2L 3756.000 18531 10.0C 1853.100
577 578 579 580	596 644 653 663	586 582 547	21: 9:10 21: 9:13 21: 9:29	36: 8:21 34: 7:47 36:50:29 40:57:57	71032	0: 6	-0:50	B1 B5	7.30	.00	318 57 58 355	83 10 6 58	18 20 19	6968 3.0C 2322.667 279? 10.0C 27.900 183? 10.0C 18.300 4259 3.0L 1419.667
581 582 583	667 665 659	347 343 351	21: 9:30 21: 9:30 21: 9:34	40:57:47 40:58:55 40:58:15	50546 50546 50546	0: 3 0: 3 0: 7	-0:59 0:9 -0:31	85 85 85	7.30 7.30 7.30	.00	191 361 61	32 85 8	63 22 25	1799 1.0L 1799.000 8192 10.0C 819.200 226 .2L 904.000
584 585 586 587	667 615 613 607	350 921 924 926	21: 9:35 21: 9:37 21: 9:39 21: 9:39	40:58:20 29:26: 6 29:25:57 29:25:55	50546 89520 89520 89520	0: 7 -0: 3 -0: 1	-0:27 -4:16 -4:26 -4:28	85 85 85	7.30 6.77 6.77 6.77	.00	237 418 201 390	50 177 73	19 24 61 124	3617 3.7C 977.568 21810 10.0C 2181.000 4415 H 1.0L 4415.000 11012 3.0L 3670.667
588 589 590	616 558 623	928 924 854	21: 9:40 21: 9:41 21: 9:42	29:25:36 29:26:32 30:45:33	89520 89520 71047	-0: 1 0: 1 0: 3	-4:47 -3:50 -0:1	85 85	6.77 6.77 9.00	.00	315 263 63	102 95 18	24 22 21	9596 3.7C 2593.514 7792 H 3.0C 2597.333 542 10.0C 54.200
591 592 593	608 605 616	346 928 889	21: 9:43 21: 9:44 21: 9:47	40:59:51 29:27:38 30: 8: 2 40:34:39	50546 89520 50556	0:16	1: 4 -2:44 0:33	95 95 88	7.30 6.77 7.70	7.80	56 102 298	43 11 10 65	15 27 60 22	2972 3.0C 990.667 270 .2L 1080.000 322? 1.0L 322.000 5466 10.0C 546.600
594 595 596 597	659 653 656 661	363 371 369 370	21:10: 2 21:10: 6 21:10: 7 21:10: 7	40:33:55 40:33:31 40:34: 2	50556 50556 50556	0: 3 0: 6 0: 7 0: 7	-0:11 -0:35 -0:4	88 88	7.70 7.70 7.70	7.80 7.80 7.80	52 310 183	43 38	138	91 .2L 364.000 2926 H 3.0L 975.333 2324 3.7C 628.108
598 599 600	660 684 684	367 133 128	51:10: 8 51:10: 8	40:33:23 45:16:40 45:16:13	50556 50560 50560	0: 9 -0: 7 -0: 7	-0:43 -0:32 -0:59	88	7.70 8.90 8.90	7.80 8.90 8.90	148 158 119	25 4 48	132 37	1128 H I.OL 1128.000 97 3.OL 32.333 1887 10.00 188.700

CYGNUS	DA	21.20	DEC	. 27. 70
CIUNUS	MA	21:24	DEC	+5/:50

OBJECT	×	Y	R.A.	DEC .	SAO	Δ	Δ	SPEC		P	PEAK	NO. OF	BG	DENSITY EXP.& DEN. VOL
NO.					NO.	R.A.	DEC.	TYPE	MAG.	MAG.	DEN.	POINTS		VOLUME FILTER EXP.
01233456011123456789911123456789911123456789991112345678999112334566666666666666666666666666666666666	605266666666666666666666666666666666666	9017 1126 366 3790 1136 1205 3790 1116 3790 1116 3790 1116 3716 3716 3716 3716 3716 3716 3716	0:92355100:15702223333355555555555555555555555555555	29: 49: 49: 49: 49: 49: 49: 49: 49: 49: 4	89524 50561 50561 50566 50566 50566 71065 71061 71061 71065 71077 71077 71077 71077 71077 71077 71077 71079 71079 71079 71079 71079 71079 71079 71079 71079 71079 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71082 71083 71077 71079 71079 71079 71077 71079 71082	1766138433156123352262562540 878 5533328152233311101248133338370243523525166404041100421 247 84 00::16613843315612335226256252626252 247 88 00::1661384331561233522625526252 247 88 00::1661384331561233522625252 247 88 00::16613843315612335226252 247 88 00::16613843315612335226252 247 88 00::16613843315612335226252 247 88 00::16613843315612335226252 247 88 00::16613843315612335226252 247 88 00::16613843315612335226252 247 88 00::1661384331561233522 247 88 00::166138433156123352 247 88 00::166138433156123352 247 88 00::166138433156123352 247 88 00::166138433156123352 247 88 00::166138432 247 8	0:177-0:505-0:177-	08888 8989999 999999 89888 8888 8888 88	9.00 1.90	9.190 7.700 8.900 7.700 8.900 7.700 8.900 7.700 8.900 8.7000 8.700 8.700 8.700 8.700 8.700 8.700 8.700 8.700 8.70000 8.7000 8.7000 8.7000 8.7000 8.7000 8.7000 8.7000 8.	156 163 163 164 165 165 166 167	11892270281127992529927777460584886960187459224281142882122944875599953273222988115774455755554654447956	239554770356967774856222577488773375813200172786603994122017321512452497333308858580151965333006144888778488778378289958	100

103

CYGNUS	RA	21.24	DEC	. 37 - 30	

OBJECT	x	Y	R.A.	DEC.	SAO NO.	A.A.	DEC.	SPEC. TYPE	V MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
701 702 703 704 705 706 707 708 7107 7108 7117 7118 7117 7119 7121 7121 7121 7121 7121 7121 7121 7121 7121 7121 7122 7123 7133 7135 7137 71	43395365593885595665566596556666666666666	538 539 540 551 551 551 551 551 551 551 55	21:13:33:14:23:23:23:23:23:23:23:23:23:23:23:23:23:	2:33:150 37: 3:3	71128 71128 71128 71128 71128 71128 71128 71128 71129 71129 71127 50627 50627 50627 50644 50644 7114 7114 7114 7114 71165 50666 50666 50666 50666 50666 50666 71165 50671 71165 50671 71165 50671 71165 50671 71173 71173 71173 71173 71174 71173 71174 71174 71174 71174 71174 71174 71174 71174 71174 71177 71179 50681 50681 50681 50681 50681 50681 71165 50671 71173 71173 71174 71177 7117	533277 4311775417 263301110549 404135488814555590 1246568015421157851733715443607 5264683	5.0.03143.7 5.0.443.57.79.23 3.60.315.81.4.8 34.31.8.3.57.75.20.3.5.3.4.3.7 5.0.2.3.5.7.74.66.1 39.4.6.6.0.5.5.5.3.5.5.3.5.5.2.3.5.2.3.5.5.2.3	888888 A000A0A08999999999999999999999999	7.78.80 7.78.80 7.78.80 8.80.00 8.80.00 7.78.80 8.80.0	7, 70 7, 70 7, 70 7, 70 7, 70 7, 70 7, 70 7, 70 7, 70 8, 30 8, 70 8, 70 8, 70 8, 70 8, 70 8, 70 8, 70 9, 20 9, 20	198 267 199 199 199 199 199 199 199 199 199 19	18857186519220456958165660110093666675465521865774196757517019999995691660066675128255266667748553985338244865774196755170199999956916600666675128255266667748553666677485536666774855366667748553666677485536666774857741967751701999999999999999999999999999999999	319975525815431176308331899221119631683007235215667 119755142581543176308338992201119631683007235215667 119755142581543315154331515630831119631683007235215667 11975514258154331515433151563083111963116830031123168300311231683031031683031123168303112316830311231683031123168303112316830311231683031123168303112316830311231683031123168303112316830311231683031031031031031031031031031031031031031	Tell

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CYGNUS	RA	21.24	DEC	+37:30

OBJECT	x	Υ	R.A.	DEC .	SAO	Δ	A	SPEC		P	PEAK	NO. OF	BG	DENSITY EXP.& DEN. VOL/
801 802 803 804 805 806 807 808 809 811 812 813	581 577 525 585 6012 600 546 555 555 454	485 490 488 385 247 163 231 724 726 726 994	21:17:23 21:17:26 21:17:28 21:17:41 21:17:50 21:18:5 21:18:7 21:18:7 21:18:9 21:18:10	38: 0:52 38: 1:15 38: 3:57 40: 3:21 42:57:48 44:29:44 43:15: 9 33:18:11 33:18:11 33:18:30 33:18:26	NO NO 50711 50716 71220 7120 71	0: 6 -0: 2 -0: 8 -0: 32 -0: 6 -0: 5 -0: 29	-0:42 -2:21 1:49 4:8 2:8 2:4	AO AO AO	8.80 9.00 6.84 8.80 6.84 6.84	9.60 9.60 9.40	DEN. 140 185 62 50 66 64 202 195 195 93 87 87	POINTS 29 14 12 6 35 9 15 16 6 17 17	17 128 13 18 26 132 137 64 16	VOLUME FILTER EXP. 1674 10.0C 167.400 532? 3.0L 177.333 409 3.0C 136.333 165 10.0C 16.500 1132? 3.7C 305.946 270 10.0C 27.000 5677 3.0L 189.000 5678 3.0L 185.333 556 3.0L 185.333 556 3.0L 185.333 556 3.0L 185.333 556 3.0L 187.333 556 3.0L 187.333
814 815 816 817 818 820 821 822 823 824 825 826 827 829	551 495 611 596 538 538 536 480 607 558 611 583 526 542	719 722 147 240 777 769 767 765 112 514 61 249 242 246 567	21:18:11 21:18:13 21:18:13 21:18:15 21:18:15 21:18:15 21:19:14 21:19:14 21:19:16 21:19:25 21:19:52 21:19:52 21:19:52 21:19:52 21:19:52 21:19:52 21:19:52 21:19:52 21:19:52	27:52:51 33:19:15 33:21:1 49:48:7 43:5:29 32:15:28 32:26:27 32:26:27 32:26:29 32:29:30 45:28:12 46:27:16 42:55:38 42:55:10 42:55:26	71220 71220 71220 71237 71237 71237 71237 71237 50751 50758 50758 50758 50758	-0: 4 -0: 2 -0: 2 -0: 2 -0: 1 -0: 4 -0: 2 0: 20 -0: 0 0: 8	2:53 4:38 -8:30 2:57 2:39 2:32 5:32 -2:34 -0:4 -3:41 -1:17 -0:40 -0:12 -0:5	A0 A0 A0 A0 A0 A0 A0 A0 A0 A0 A0 A0 A0 A	6.84 6.84 6.03 6.03 6.03 6.03 6.03 6.03 6.03 8.80 9.20 6.71 8.20 8.20 8.40	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	66 158 70 72 45 183 80 176 135 60 51 47 56 47 86 37	29 38 15 17 10 9 18 11 37 13 9 67 4 15 47	17 21 22 21 22 20 132 20 132 20 15 22 17 22 19 29 15	1095? 3.00 365.000 2202 10.00 220.20 518 3.00 172.667 5587 10.00 55.800 2117 3.70 57.027 31072 3.01 103.333 596 L 3.70 161.001 340 L 3.01 191.500 405 L 3.00 135.000 216 10.00 21.600 148 10.00 14.800 178 L 10.00 14.800 178 L 10.00 17.800 95 L 3.70 25.676 504 10.00 28.333
830 8312 833 833 835 836 837 839 8412 8434 8434 8434	5+89+81 5545555555555555555555555555555555555	562 568 569 470 469 464 363 467 668 366 367 185 366 367 185 366 547	21:20:19 21:20:21 21:20:29 21:20:45 21:20:45 21:20:45 21:20:59 21:21:3 21:21:4 21:21:4 21:21:4 21:21:4 21:21:17 21:21:13	36:25:25 36:27:1 36:28:16 38:25:47 38:25:21 40:27:59 40:27:59 40:29:34 40:29:34 40:29:18 40:30:50 36:48:18	71255 71255 71265 71266 71266 71266 71266 50772 71266 50772 50772 50772 71277 71277	-0: 7 -0: 5 -0: 4 -0: 4 -0: 2 -0: 0 0: 4 0: 12 0: 9 0: 11 -0: 0 0: 19 -0: 5	-0: 6 1:30 2:45 0:35 -1: 1 0: 9 -0:59 1:44 0:37 -0:36 0:20 -2:35 1:53 -0:29	A0 A0 A0 A0 B5 B5 B5 B5	8.40 8.40 6.45 6.45 6.45 6.45 7.40 7.40 8.70 7.40 9.10	8.20 8.20 .00 .00 .00 .00 7.30 .00 7.30 7.30 9.00 7.30 9.10	100 52 44 69 172 134 271 65 150 137 288 51 125 165 46	197 121 188 59 100 130 230 465 5	24 18 15 17 129 18 20 15 141 19 62 134 15 134 15 134 17	775 10.0C 77.500 186 3.7C 50.270 100 3.0C 33.333 406 L 3.7C 109.730 332 L 3.0L 110.667 1469 L 10.0C 146.400 4622 10.0C 462.200 335 L 3.0C 11.667 3297 3.0L 109.667 1693 L 3.7C 457.568 898 1.0L 898.000 105 10.0C 10.500 105 10.0C 10.500 1299 3.0C 433.668 124 3.0L 41.353
846 848 849 851 952 853 855 857 856 857 859 861	5512 5538 5538 5539 5525 5525 5526 5538 5538 5538 5538 5538 5538 5538 553	+32 +352 +333 +338 +334 +634 638 637 +52 +33 576	21:21:23 21:21:23 21:21:26 21:21:27 21:21:27 21:21:27 21:21:44 21:21:44 21:21:44 21:21:44 21:21:44 21:21:54 21:21:54 21:21:54 21:22:0 21:22:0 21:22:0	39: 6:57 39: 8:10 36:49:33 39: 7:45 39: 9: 0 39:10:41 34:57:42 34:59:16 34:59:41 35: 0:31 36:44:51 46:51:50 46:56:10 46:56:13	71273 71277 71277 71273 71273 71282 71284? 71282 71282 71282 50792? 50801? 50792 NO	0: 4 0: 5 0: 0 0: 9 0: 15 0: 15 0: 10 0: 24 0: 0	-1: 7 0: 6 0: 45 -0: 19 0: 56 2: 37 0: 38 9: 2 2: 1: 37 3: 27 -5: 7 -7: 36 -0: 46	89 89 89 89 89 40 40 40 40 40 40	7.90 7.90 9.10 7.90 7.90 7.90 8.20 8.20 8.20 8.20 8.20	7.40 7.40 9.10 7.40 7.40 7.40 9.10 9.10 9.10 9.10 9.10	94 98 85 203 164 75 110 110 62 192 50 48 177 177 73	7 165 155 126 25 10 63 88 44	62 16 21 130 19 19 140 14 122 136	180 L 1.0L 180.000 692 3.7C 197.027 577 10.0C 57.700 632 3.0L 216 667 2059 10.0C 205.300 1868 10.0C 118.800 299 3.7C 80.811 342 3.0L 118.00 177 3.0C 59.000 177 3.0C 59.000 177 3.0C 59.000 177 3.0C 121.333 273 L 3.0L 11.000 173 3.0C 191.000 173 3.0C 191.000
862 863 864 865 866 867 869 871 873 874 875	5427961113245555555555555555555555555555555555	568 574 705 701 707 226 704 655 651 657 840 654 238	21:22:16 21:22:16 21:22:25 21:22:28 21:22:28 21:22:28 21:22:36 21:22:55 21:22:55 21:22:55 21:23: 2	38:56:53 36:16:57 36:18:29 33:38:6 33:37:11 33:38:45 43:12:45 33:40:1 34:36:55 34:37:37 30:57:14 34:38:53	71283 NO NO 71300 71300 71307 71300 50805 71300 NO NO	0: 4 -0: 6 -0: 4 -0:27 -0: 3 0: 1 0: 5	0:15 2:42 1:48 8:54 3:22 -0:52 4:38	A 0 A 0 A 3 A 0 A A 0 A A 0 A A 0 A A 0 A A 0 A A 0 A A 0 A A 0 A	8.40 8.40 8.30 8.40 8.40 8.40	8.80 8.90 8.90 8.60 8.90 9.00 8.90	51 85 48 175 91 49 85 40 193 119 51 54	7 34 0 7 22 2 7 18 4 2 3 3 3 5 8 6	17 32 18? 141 23 23 17 23 15 140 19 15 16 15 167	192 10.00 19.200 17.500
877 878 879 880 881 882 883 884 885 886 887 889 889 889	4985 51577 5100 5100 5100 5100 5100 5100 51	716 559 559 565 565 562 563 42 566 236 315 315	21:23:35 21:23:35 21:23:35 21:23:37 21:23:37 21:23:41 21:23:41 21:23:42 21:23:43 21:23:47 21:23:47 21:23:47	33:19:29 36:26:49 36:28:19 36:28:19 36:28:52 36:27:34 36:27:34 36:27:34 46:49: 2 36:27:16 43:5:15 43:24:24 41:24:24 41:24:24 38:23:19	71326 71313? 71329 71313? 71329 71329 71329 71329 50828 50839? 71330 71329	-0: 9 0:21 -0:10 0:24 -0: 7 -0: 5 0:27 -0: 4 -0: 1 0: 9 -0:16 -0: 2	3:34 -1:32 -0:13 -0:2 1:17 -0:11 -0:48 0:31 0:14 -1:0 -6:3 5:22	A5 B0 A5 B0 B0 A5 B0 A5 B0 A5 B0	8.10 8.50 5.84 8.50 5.84 8.50 5.84 9.10 8.50 8.50	8.40 8.50 .00 8.50 .00 8.50 .00 9.40 9.00 8.50	62 415 369 369 320 399 399 242 169 64 62 346	12 203 110 110 55 112 112 26 21 114 10 10	19 24 22 67 138 138 52 27 125 18 17	365 10.0C 36.500 20836 L 10.0C 2083.60 20836 L 10.0C 2083.60 9598 L 3.7C 2599.059 9598 L 3.7C 2599.059 4362 L 1.0L 4362.000 8400 L 3.0L 2800.000 8400 L 3.0L 2800.000 8401 L 1.0L 4571.000 1168 .2L 4672.000 4517 3.0L 150.333 330 10.0C 333.000 321 L 10.0C 32.130 821 L 10.0C 32.130
892 893 894 895 896 897 898 899	459 575 544 546 472 478 479 542	955 51 271 233 798 794 801 224 206	21:23:53 21:23:58 21:24: 2 21:24:16 21:24:34 21:24:37 21:24:40 21:24:52 21:24:57	28:38:53 46:44:27 42:18:22 43: 8:26 31:45:29 31:46:11 31:45: 6 43:12:49 43:34: 4	89706 50836? 50833 50856? 71343 71343 71343 50856 50859	-0:18 0: 2 0: 8 -0:35 -0: 1 0: 2 0: 6	-0:42 7:59 -0:12 -5:53 4: 8 4:51 3:46 -1:30	A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A2 A	9.20 8.90 8.60 8.50 8.50 8.50 8.50 8.20 7.30	9.49 9.50 9.10 8.40 8.60 8.60 8.40 7.50	100 52 68 160 155 77 48 77	19 5 8 24 4 19 5 12 33	18 23 25 125 130 20 17 20	8867H 3.7C 239,459 121 .2L 489.000 246 10.0C 24.500 638 H 3.0L 212.567 87 3.0L 29,000 153 3.7C 35.676 133 3.7C 35.676 134 3.0L 0.0C 143.300

			CYGN	JS RA 21:24	DEC +37:30	1								
OBJECT NO.	×	Y	R.A.	DEC.	5A0 NO.	R.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BC	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 921 921 921 921 921 921 921 921 921 922 923 924 925 927 929 931 933 934 945 946 947 956 956 957 957 957 958 959 959 959 959 959 959 959 959 959	5-17 5-33 5-35	213 278 211 289 211 28	21:24:59 21:24:59 21:24:59 21:24:59 21:25:17 21:27:17 21:27:27 21:27 21:27 21:27 21:27 21:27 21:27 21:27 21:27 21:27 21:	22:388:35:55:59:15:80:55:55:33:33:35:55:59:35:35:55:59:35:35:55:55:35:35:55:55:55:55:55:55:55:	50859 50861 50869 50861 50869 50861 50869 50861 50869 71358 71358 71358 71358 71358 71358 71358 71358 71358 71358 7137 5091 50930 50930 50930 50930 50930 50930 50930 50937 71397 71407	5577856420149 1987 78 9 06321536258 211 8319009776571855311111483 5 6 89999465880237999308631-14681 64	-1:302-0-10331 9-12-10-0-11-103-11-1-1-1-1-1-1-1-1-1-1-1-1-	9 A 9 A 9 A 9 A 9 A 9 A 9 A 9 A 9 A 9 A	7. 30 8. 60 88 8. 30 8. 30 8. 30	7.50 8.70 8.70 7.50 7.50 7.50 9.60 8.30 8.60 8.30 8.60 8.50	63 153 3 152 6 6 4 6 6 6 7 7 7 8 6 7 7 8 7 8 7 7 8 7 8 7 7 8 7 8	9779677041551801177740493144551205443372243772666623334867789154946458511074697333999585668233943772666623334867789311691716917169733399958566823394877289528141522222141528222141528235110746	755560779829216893348661289359567625056762272438434385997957286347625099732167098845926057477798693716250977316677777986937777986937777798693777798693777798693777798693777798693777798693777779869377779898459777798693777798984597777989845977779869377779898459777798984597777989845977779898459777798984597777989845977779898459777798984597777989845977779898459777798984597777989845977779898459777798984597777989845977779898459777798984597777989845977779889847777988984777798898777798898777798898777798898777798898777798898777798898777798898777798987777989877779898777798987777798987777989877779898777798987777989877779898777798987777989877779898777798987777989877779898777798987777989877779898777798987777798898777798898777798898777798898777798898777798898777798898777779889877779889877779889877779889877779889877779889877779889877779889877779889877779889877779889877777988987777798898777779889877777988987777798898777779889877777988987777798898777777	291 L 3.7C 78.699

BEST AVAILABLE COPY

CYGNUS RA 21:24 DEC +37:3	
	n

OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	A.A.	Δ DEC.	SPEC.	V MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL./ VOLUME FILTER EXP.
1001	471 440 469	326 589 330	21:31:21 21:31:21 21:31:22	41: 5: 2 35:51:23 41: 5:17	51022	0: 6 0: 7	-0: 9 0: 5		8.90 8.90	8.80	82 44 156	15 4 5	18 16	568 10.00 56.800 932 3.70 25.135 118 3.0L 39.333
1004 1005 1006 1007	397 504 454 419	852 113 469 729	21:31:30 21:31:32 21:31:33	30:27:41 45:23:18 38:17:19	71461	-0: 0	-0:58	89	8.00	.00	39 150 141	9 23	17 119 18	877 10.0C 8.700 2267 3.0L 75.333 1298 3.7C 350.811
1008 1009 1010	448 411 451	467 726 463	21:31:34 21:31:35 21:31:36 21:31:36	33: 3:43 38:15:57 33: 3:17 38:17: 9	71465 71461 71465 71461	-0: 6 0: 1 -0: 3 0: 3	4:13 -2:20 3:48 -1:8	A0 B9 A0 B9	7.70 8.00 7.70 8.00	7.80 .00 7.80	261 163 250	6 22 6 47	17 130 131 20	152 L 3.7C 41.081 1345 H 3.0L 448.333 155 3.0L 51.667 3703 10.0C 370.300
1011 1012 1013 1014	481 452 360 417	243 465 726 723	21:31:37 21:31:38 21:31:41 21:31:41	42:44:30 38:16:41 33: 3:53 33: 3:31	51029 71461 71465 71465	0: 5 0: 5 0: 2	-0:27 -1:36 4:23 4:2	89 A0 A0	8.20 8.00 7.70 7.70	9.10 .00 7.80 7.80	146 124 42 85	25 14 4 20	20 62 14 18	1444 10.0C 144.400 541 1.0L 541.000 97 L 3.0C 32.333 812 10.0C 81.200
1015 1016 1317 1018	395 459 463 479	466 393 250 247	21:31:42 21:31:43 21:31:43 21:31:44	38:18:29 39:43:23 42:44:35 42:44:44	71461 71464 51029 51029	0: 8 0: 5 0:11	0:12 0:18 -0:22	A0	8.00 8.80 8.20	8.90 8.10 8.10	113 129 76 168	22 25 11	14 18 18	1087 H 3.0C 362.333 1306 10.0C 130.600 399 3.7C 107.838 353 3.0L 117.667
1020	456 456 461 424	397 397 400 246	2::31:46 21:31:46 21:31:47 21:31:53	39:42: 9 39:42: 9 39:42: 9 42:45:34	71464 714717 71464 51029?	0: 7 -0:28 0: 8 0:21	-0:55 5:50 -0:56 0:37	AO	8.80 9.20 8.80 8.20	8.90 9.50 8.90 8.10	189 189 66	10 10 11 9	133 133 15	356 3.0L 118.667 356 3.0L 118.667 368 3.7C 99.459 306 3.0C 102.000
1023 1024 1025 1026	451 402 402 430	439 396 396 596	21:31:54 21:31:56 21:31:56 21:32:1	38:45:58 39:43:15 39:43:15 35:35: 8	71464 71471? 71470	0:17 -0:18 -0:11	0:10 6:55 3: 6	A2	8.80 9.20 7.80	8.90 9.50 8.30	58 54 54 53	6 9 9	17 14 14	172? 10.0C 17.200 265 3.0C 88.333 265 3.0C 88.333 250? 10.0C 25.000
1027 1028 1029 1030	350 503 500 500	757 94 91 88	21:32:13 21:32:25 21:32:26 21:32:30	32:25:15 45:48: 3 45:48:14 45:47:35	51041 51041 51041	-0: 3 -0: 1 0: 2	1:43	89 89	8.70 8.70 8.70	8.00 8.00 8.00	94 180 182	8 32 40 53	14 18 118 21	197? 3.0C 65.667 1308 H 3.7C 353.514 1407 3.0L 469.000 3755 H 10.0C 375.500
1031 1032 1033 1034	394 444 444	761 91 91	21:32:37 21:32:39 21:32:39	32:24: 2 45:43:50 45:43:50	51041 51045?	0:11	-2:30 8:44	89	8.70	8.00 9.50	51 71 71	10 25 25	24 15 15	238? .2L 952.000 947 H 3.0C 315.667 947 H 3.0C 315.667
1035 1036 1037	387 466 386 335	450 258 795 796	21:32:45 21:33: 1 21:33: 2 21:33: 2	42:26:13 31:38:54 31:37:25	51055 71483? 71483	0: 9	0:59 5:17 3:49	AO AO	9.10 7.21 7.21	9.30 .00 .00	78 180 63	12 15 18 16	19 124 20	283? 3.0C 94.333 553 10.0C 55.300 631 3.0L 210.333 451 3.0C 150.333
1038 1039 1040 1041	394 392 468 509	799 792 265 35	21:33: 2 21:33: 4 21:33: 6 21:33: 7	31:38:14 31:39:26 42:24:60 46:55:27	71483 71483? 51055 51057	0: 9 0:12 0: 7 -0: 3	4:38 5:50 -0:14 3:29	A0 A0	7.21 7.21 9.10 8.20	.00 9.30 7.70	76 136 44 62	17 45 4 25	18 24 16 17	598 3.7C 161.622 2069 10.0C 206.900 94 3.7C 25.405 785 3.7C 212.162
1042 1043 1044 1045	506 506 478 475	32 28 198 207	21:33:11 21:33:11 21:33:13 21:33:15	46:55:34 46:56:11 43:44:16 43:28:38	51057 51057 51058	0: 3	3:35 4:12 -0: 8	A0 A0 BB	8.20 8.20	7.70 7.70	154 126 53 223	19 58 8 43	121 21 15 58	482 3.0L 160.667 2993 H 10.0C 299.300 244? 3.7C 65.946 2674 1.0L 2674.000
1046 1047 1048 1049	475 472 471 467	212 205 209 211	21:33:15 21:33:16 21:33:17 21:33:20	43:27:51 43:28:53 43:27:51 43:29: 4	51058 51058 51058 51058	0: 2 0: 3 0: 5 0: 7	-0:55 0:7 -0:55 0:18	88 88 88	6.70 6.70 6.70 6.70	.00	282 384 374 57	107 67 10	18 22 125 23	4458 3.7C 1204.865 9773 10.0C 977.300 5677 H 3.0L 1892.333 269 .2L 1076.000
1050 1051 1052 1053	381 500 449 421	447 46 31 562	21:33:25 21:33:25 21:33:27 2::33:27	38:38:50 46:34:50 46:49:50 36:13:42	51057 71492	0:18	-2: 9 -0:57	AO	8.20	7.70	49 50 46	17 9 16	13 22 17	470? 3.0C 156.667 216? 0.0C 21.600 419 H 3.0C 139.667 143 10.0C 14.300
1054 1055 1056 1057	387 416 307 357	796 208 898 898	21:33:31 21:33:32 21:33:33 21:33:39	31:33:44 43:28:36 29:31:26 29:31:7	71483 51058 89826 89826	0:38 0:19 0: 0	0: 7 -0:10 0: 9 -0: 9	88 8	7.21 6.70 8.40 8.40	.00 .00 7.74 7.74	68 256 103 226	15 46 42 54	19 15 15 118	485 L 10.0C 48.500 3701 H 3.0C 1233.667 1983 3.0C 661.000 2874 3.0L 958.000
1058 1059 1060 1061	366 363 364 429	901 896 895 501	21:33:39 21:33:40 21:33:42 21:33:42	29:31:55 29:32:11 29:31:51 37:36: 0	89826 89826 89826 71499	0: 6 0: 6 0: 9 -0: 7	0:39 0:54 0:34 -0:21	8	8.40 8.40 8.40 8.60	7.74 7.74 7.74 8.70	121 102 240	49 25 84 33	18 58 22 16	2476 3.7C 669.189 779 1.0L 779.000 6711 10.0C 671.100 1426 3.7C 385.405
1062 1063 1064	429 427 422	501 497 499 499	21:33:42 21:33:46 21:33:48	37:36: 0 37:35:15 37:34:16 37:34:16	71504? 71499 71499? 71504?	-0:24 -0:3 -0:1	-3: 6 -1: 6 -2: 6	A0	8.60 8.60	8.00 8.70 8.70	91 106 215 215	33 10 28	16 63 132 132	1426 3.7C 385.405 309 1.0L 309.000 1299 H 3.0L 433.000
1065 1066 1067 1068	422 426 426 370	495 495 498	21:33:48 21:33:52 21:33:52 21:33:56	37:35:44 37:35:44 37:35:46	71499? 71504 71499?	0: 3 -0:14 0: 7	-4:50 -0:37 -3:22 -0:35	AO AO	8.20 8.60 8.60	8.00 8.70 8.00 8.70	194 194 82	28 54 54 29	20 20 16	1299 H 3.0L 433.000 3944 H 10.0C 394.400 3944 H 10.0C 394.400 1038 3.0C 346.000
1069 1070 1071 1072	370 473 416 455	498 150 536 236	21:33:56 21:34:14 21:34:37 21:34:40	37:35:46 44:32:49 36:52:36 42:50:23	71504 51088 51099	-0:10 -0:5	-3:20 0:32 0:18	0A	9.00 9.70	8.00 9.20 8.70	82 65 47 59	29 14 4 8	16 19 15 21	1038 H 3.0C 346.000 453 10.0C 45.300 118? 3.7C 31.892 220 10.0C 22.000
1073 1074 1075 1076	376 313 455 431	786 797 185 331	21:34:57 21:35: 3 21:35:42 21:35:43	31:51:35 31:31:46 43:48: 5 40:55: 1	51110	0: 7	-1:36	AO	8.90	8.90	51 40 50 55	6 6 7	18 15 19	162? 3.7C 43.784 96? 3.0C 32.000 159 L 10.0C 15.900 195? 10.0C 19.500
1077 1078 1079 1080	420 418 285 419	427 421 889 423	21:35:45 21:35:48 21:35:50 21:35:51	39: 4:29 39: 4:25 29:37:49 39: 3:37	71538 71538 89862 71538	-0: 2 0: 1 0: 1 0: 5	-1: 0 -1: 4 -0: 6 -1:52	89 89 A0 89	6.66 6.66 8.40 6.66	.00 .00 .00	153 266 43 125	28 50 8 14	16 18 16 63	1598 L 3.7C 431.892 4269 10.0C 426.900 187 3.0C 62.333 519 1.0L 519.000
1081 1082 1083 1084	414 343 334 341	993 889 887	21:35:56 21:35:56 21:35:57 21:35:59	39: 3:46 29:38:14 29:38:26 29:38:13	71538 89862 89862 89862	0: 9 0: 7 0: 8 0:10	-1:43 0:19 0:31 0:19	A0 A0 A0	6.66 8.40 8.40	8.02 50.8 50.8	259 51 144 97	23 14 10 44	134 18 115 20	1305 3.0L 435.000 386 3.7C 104.324 248 3.0L 82.667 1844 10.0C 184.400
1085 1086 1087 1089	361 434 368 406	423 294 700 439	21:36: 0 21:36: 0 21:36: 9 21:36:44	39: 5:23 41:38:56 33:31:38 38:41:20	71538 51118 71557	0:13	-0: 6 -0:21 -0:35	89 A0	6.66 8.70 8.60	8.60 8.60	117 66 83 83	25 13 15 17	19 19 30 18	1254 3.00 418.000 418 10.00 41.800 484? 2L 1936.000 667 10.00 66.700
1089 1090 1091 1092	408 402 442	445 442 192 168	21:36:48 21:36:51 21:36:59 21:37:5	38:41:13 38:40:35 43:38:39 44: 6: 9	71557 71557 51140 51146?	-0: 1 0: 2 -0: 2	-0:42 -1:20 -1: 9 8:41	A5	8.60 8.60 8.90 8.70	8.80 8.80 8.90	165 50 57	7 4 7 6	16 134 19 25	172 3.7C 46.486 103 3.0L 34.333 180 10.0C 18.000 152? 10.0C 15.200
1093 1094 1095	462 448 415	72 138 360	21:37:22 21:37:24 21:37:27	46: 0:49 44:40:48 40:24:27 40:23:39	51150 51151 51151	0: 0	3:54	89 A0	8.20	7.70	58 52 80 92	16 5 14 5	19	485 L 10.0C 48.500 1417 10.0C 14.100 545 3.7C 147.297 129 1.0L 129.000
1096 1097 1098 1099 1100	414 412 426 409 355	356 354 258 357 357	21:37:29 21:37:29 21:37:32 21:37:35 21:37:42	40:23:39 40:24:24 42:20:54 40:23:44 40:23:59	51151 51151 51152 51151 51151	0: 5 0: 5 0: 3 0:11 0:17	-0:58 -0:13 1:23 -0:53 -0:38	0A 0A 0A	8.10 8.10 9.10 8.10 8.10	7.70 7.70 9.60 7.70 7.70	170 51 199 69	31 7 14	17	1816 10.0C 181.600 194 10.0C 19.400 560 H 3.0L 186.667 456 3.0C 152.000

CYGNUS	CO A	21	. 34	DEC	- 27	. 70

OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	A.A.	DEC.	SPEC.	V MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EXP. B DEN. VOLV
1101 1102 1103 1104	442 439 439 442	169 165 163 164	21:37:53 21:37:58 21:37:58 21:38:1	44:11:24 44:12:12 44:11:6 44:11:46	51161 51161 51161 51161	-0: 5 -0: 0 0: 1 0: 3	-0:53 -0:5 -1:11 -0:52	89 89 89	6.70 6.70 6.70 6.70	.00	136 186 265 90	30 30 53	17 116 20	1682 3.70 454.595 1071 3.0L 357.000 4360 10.00 438.000 389 L 1.0L 389.000
1105 1106 1107	382 408	131 166 335	21:38:5 21:38:15 21:38:35	44:47:19 44:10:32 40:53: 7	51161 51171	0:17 -0:1	-1:45 -0:38	89	6.70 8.90	.00	47 114 52	26	13	93? 10 0C 9.300 1324 3.0C 441.333 102 3.7C 27.568
1108 1109 1110	305 403 405 403	919 332 329 327	21:38:36 21:38:37 21:38:37 21:39:16	28:53:59 40:52:29 40:53: 5	51171 51171 51178	0: 2 0: 1 0: 4	-1:16 -0:40 -0:57	40	8.90 8.90 8.40	8.90 8.90	161 96 54	16	20 133 26	103? 10.0C 10.3C0 100 3.0L 33.333 651 10.0C 65.100 226 3.7C 61.081
1113	401 399 344	323 323	21:39:18 21:39:19 21:39:24	41: 3:25 41: 2:43 41: 3: 4	51178 51178 51178	0: 6 0: 8 0:12	0:17 -0:24 -0:4	AO AO	8.40 8.40 8.40	8.00 8.00 8.00	106 156 44	19 6 5	126	845 10.0C 84.500 148 3.0L 49.333 126 3.0C 42.000
1110	405 403 401 399	327 327 327 327 327 327 330 330 330 330 330 330 330 33	21:39:39:39:39:39:39:39:39:39:39:39:39:39:	40:53: 5 41: 2:10 41: 3:25 41: 2:43	51171 51178 51178 51178 51187 51187 51187 51187 51187 51187 51189 51186 51196 51207 71637 71648 71648 71648 71648 71648 71648 71648 71648 71648 71648 71648 71648 71648 71648 71654 71654 71669 71674 71689 71674 71689 71699 7170 71699 7170 7170 7170 7170 7170 7170 7170 7170	0: 1 0: 4 0: 6 0: 8	-0:40 -0:57 0:17 -0:24	AO	8.40 8.40 8.40	8.90 8.00 8.00	96 54 106 156	8 19 6	26 17 21 126	651 10.0C 65.100 226 3.7C 61.081 845 10.0C 84.500 148 3.0L 49.333
1194 1195 1196	259 252 260	788 790 795	21:45:42 21:45:45 21:45:45	31:20:21 31:19:15 31:18:36	71710 71710 71710	0:13 0:16 0:16	2:36 1:30 0:51	88 88	8.10 8.10 8.10	8.20 05.8 05.8	158 196 87	59 35 31	20 124? 17	3501 10.0C 350.100 1076 3.0L 358.667 1217 3.7C 328.919
1197 1198 1199 1200	245 209 316 317	841 728 441 442	21:45:53 21:46:10 21:46:15 21:46:18	30:14:38 32:32:55 38:22:24 38:22:1	71718 71722 71722	-0: 3 -0: 9 -0: 6	-0:52 -2:31 -2:55	89 89	6.79 5.80 5.80	.00	36: 197	59 103 29	19 15 21 61	1277 10.0C 12.700 1125 3.0C 375.000 10308 10.0C 1030.800 1650 1.0L 1650.000

OBJECT	×	Y	CYGNI R.A.	DEC.	DEC +37:30	Δ	٨	SPEC.	v	P	PEAK	NO. OF	BG	DENSITY	EXP &	DEN. VOL /
NQ.					NO.	R.A.	DEC .	TYPE	MAG.	MAG.	DEN.	POINTS	60	VOLUME	FILTER	EXP.
12034 12034 12036 12056	1160 1160 1160 1160 1160 1160 1160 1160	9477 7446 77315 77	21 466 233 344 422 442 442 442 442 442 442 442	38: 23: 388 38: 23: 35: 35: 36: 36: 22: 37: 38: 23: 23: 23: 23: 23: 23: 23: 23: 23: 23	71728 71728 717728 717728 717718	-0:00:11143100265374788097422 97654 8 62398 22-133 1556630411269139076323654	-1:188	900999990000 A A A A A A A A A A A A A A	5.67.980 6.5.680 6.5.680 6.6.680 6.6.680 6.880 6.880 6.	0.00 0.00	269 4 67 7 3 4 6 6 7 3 5 6 6 7 3 4 6 6 7 3 5 6 6 7 3 4 6 7 3 5 6 6 7 3 4 6 7 3 5 6 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 6 7 3 7 3	558 998 997 7777 444 430000 972 6444 8823538 801 628895660 959 954 9265304 404 964 554 1861 139 452 885 946 874 65107 4077 1116663	19049058719999998888866107729453144386505668127744949027744998899996883877731626834942950847796755588004	190 L 314? 503 + 503 + 603 + 604 + 1323 1635 1007 639 L 99 9 137 127 109 109 109 109 109 109 109 109 109 109	3. OLL 3. OLC 3. OLC	1180. 811 1495. 6667 1112. 0001 1172. 6667 1112. 0001 1172. 667 262. 0000 374. 595 404. 9900 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 946 55. 3333 35. 3333 35. 3333 35. 3333 35. 3333 36. 3333 37. 3333 38. 3333 38. 3333 38. 3333 38. 3333 39. 3000 149. 1000 149. 1000 120. 667 120. 668 120. 0000 120. 668 120. 0000 12

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			CYGN	US RA 21:24	DEC +37:30	0										
OBJECT NO.	×	Y	R A.	DEC.	SAO NO.	A.A.	DEC.	SPEC .	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY VOLUME	EXP.& FILTER	DEN. VOL / EXP.
1 301 1 303 1 304 1 305 1 306 1 307 1 308 1 310 1 311 1 312 1 313 1 314 1 315 1 316 1 317 1 318 1 319 1 321 1 323 1 321 1 323 1 321 1 323 1 321 1 323 1 324 1 325 1 326 1 327 1 328 1 329 1 321 1 321 1 321 1 323 1 324 1 325 1 326 1 327 1 328 1 329 1 329	2162727319451327395712453329551197125575757575757575757575757575757575757	197 196 501 196 501 197 271 271 271 271 271 271 271 271 271 27	21:566:55 21:566:33 21:566:33 21:566:33 21:566:39 21:5666:39 21:5666:39 21:5666:39 21:56666 21:56666 21:56666 21:56666 21:56666 21:56666 21:56666 21:56666 21:56666 21:56666 21:5666 21:5666 21:5666 21:56666 21:56666 21:56666 21:56666 21:5666 21:56	42:56:35 43:56:220 43:56:221 43:225 43:225 41:228 41:238	51496/ 51496/ 51496 51496 51507 71507 71507 71910 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 51511 515262 71933 71942 71942 71952 71942 71953 71961 71973 71961 71973 71961 71973 71961 71973 71961 71973 71961 71973 71961 71973 71961 71973 71961 71973 71973 71961 71973 71974 71974 71974 71974 71974 71974 71974 71974 71974 71974 71974 719	554 94329-1290-12885908 366559585248740415972882415775882485335588884 541540078 2265416	-3:2422 -3:5:422 -3:5:422 -3:5:422 -3:5:32 -0:18 -0:5:63 -1:5:61 -1	99A29	7.70 7.70 7.70 7.70 7.70 8.90 8.90 8.70 8.90 8.70 8.90 8.90 8.90 8.90 8.90 8.90 8.90 8.9	7.600 7.600 7.600 7.600 7.300 7.300 7.700 7.900 7.900 7.900 7.900 7.900 7.900 7.900 7.900 8.900	98 189 191 121 151 151 151 151 151 151 151 151 15	3388531-6642-63494499662+022047770339997707++0000689997737792244986481110+0775685868++5586	1433353619251111538886533886798833888591111155208883388679833111155208883388798338879833887777533597988335877775535987835978787878787878787878787878787878787878	1309 + 1509 15	3. OL 3. 7CC 10. OCC 13. OCC 13. OCC 10. OCC 10. OCC 10. OCC 13. OCC 10. OCC 1	436.333 503.000 33.2643 503.000 33.2643 269.000 33.2643 307.66

2 939		ENSITY EXP.& OLUME FILTER		NO. OF POINTS	PEAK DEN.	P MAG.	WAG.	SPEC. TYPE	DEC.	Δ R.A.	5A0 NO.	DEC.	CAPR R.A.	Y	x	OBJECT NO.
8 797 188 20-11-82 11-51-16 1-91-52 11-51-16 1-91-52 1	6481.667 10987.000 4364.100 5553.333 2247.933 172.667 255.000	10987 1.0L 43641 10.0C 16660 3.0L 67438 30.0C 518? 3.0C	96 22 203 23 18	129 305 171 393 13	335 449 389 469 98	.00	5.30 5.30 5.30	85 85	1:51 1:14 1:55	-0:15 -0:15 -0:12	163771 163771 163771	-15: 6: 2 -15: 6:39 -15: 5:58 -15: 5:33 -15:39:59	20:36:14 20:36:14 20:36:16 20:36:29 20:40:20	307 303 310 300 357	929 904 928 913 885	3 4 5
15 874 964 261-49127 19-351 3 163943 01 4 -316 100 169 70 19 7737 10 100 101 1	96.667 2948.667 1812.533 2843.333 3721.000 2173.600	290? 3.0L 8846 3.0L 54376 L 30.0C 8530 3.0C 3721 1.0L 21736 10.0C	194 24 21 91 22	9 116 330 84 65 163	261 357 467 328 223 427	.00	3.83 3.83 3.83	A0 A0	-0:38 -0:8 -2:7	-0: 4 -0: 0 0: 3	144810 144810 144810	-11:51: 6 -9:42:10 -9:41:26 -9:40:56 -9:42:55 -9:42:10	20:41:42 20:44:54 20:44:54 20:44:58 20:45: 1 20:45: 3	198 122 111 122 119 116	716 703 703 715 689	9 10 11 12 13
19 896 592 201-93 \ -191-127 105943 0.10 -1:32 A0 7.18 .00 623 13 221 498 3.0 C 105943 1059	185.000 473.700 369.333 69.667	4737 10.0C 1108 H 3.0C	19	70 30	169	.00						-19:53: 3 -19:52:13	20:49:27	584 592	874 885	15 16
22 793 198 2019 199 199 199 199 199 199 199 199 199	136.000 491.367 39.333	408 3.0L 14741 H 30.0C	551	13 167	263	.00						-19:51:27 -19:53:20	20:49:34	592 582	896 885	18
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Section Sect	702.000 818.500 654.667 804.867	8185 10.0C 1964 3.0L	21 259	82 41	335 341	.00	6.23	AO AO	-1:35 -0:19	0: 7 0: 7	164043	-19:15:24 -19:14: 8	20:56:52	598 605	784 807	35 36
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59 372 84 21: 7:13 -5:30:43 60 718 827 21:11:19 -22:27:14 190147 0:10 -2:34 A0 6.88 .00 88 42 18 1689 10.00 61 728 834 21:11:20 -22:27:38 190147 0:13 -2:28 A0 6.88 .00 49 6 23 145 L 3.00 62 448 335 21:11:30 -10:46:58 164240 -0:5 5 0:6 89 6.49 .00 287 146 27 14027 30.00 63 434 339 21:11:39 -10:46:58 164240 0: 4 1:48 89 6.49 .00 244 61 22 4730 10.00 64 727 825 21:11:41 -22:28:12 190147 0:31 -3:2 A0 6.88 .00 110 113 20 5788 30.00 65 458 341 21:11:43 -10:49:28 164240 0: 8 -0:41 89 6.49 .00 231 17 165 651 1.0L 66 446 345 21:11:43 -10:49:28 164240 0: 9 1:26 89 6.49 .00 231 17 165 651 1.0L 67 458 345 21:11:46 -10:49:41 164240 0: 11 -0:54 89 6.49 .00 385 194 328 6219 H 3.0L 68 678 739 21:12:11 -20:16:15 69 743 870 21:12:29 -23:10:56 69 743 870 21:13:52 -2:21:58 145256 -0:14 0: 4 A0 7.34 .00 52 6 18 161 2 300 7 2 300 7 2 300 7 300	727.667 979.167 988.900 507.000	29375 30.0C 9889 10.0C	55	212	409 341	.00	5.27	AO	-0:46	0:13	190050	-21:24:30 -21:25:14	21: 5:55	744	759 747	56 57
62	153.000 168.900 48.333	459? 3.0C 1689 10.0C	17 18	12	88				-2:34 -2:28			-5:30:43 -22:27:44	21: 7:13	84 827	372 718	59 60
66	467.567 473.000 192.933	14027 30.0C 4730 10.0C 5788 30.0C	27 22 20	113	110	.00	6.49 6.49 6.88	89 89 A0	0: 6 1:48 -3: 2	-0: 5 0: 4 0:31	164240 164240 190147	-10:48:41 -10:46:58 -22:28:12	21:11:30 21:11:39 21:11:41	335 339 825	448 434 727	62 63 64
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74 356 226 21:14:20 -7:36:33 75 395 338 21:14:23 -10:19:6 164275 0:7 1:35 A0 6.85 .00 58 11 19 310 L10.0C 76 405 335 21:14:35 -10:19:11 164275 0:18 1:29 A0 6.85 .00 70 36 22 12:15:15 L30.0C 77 402 320 21:14:46 -9:44:32 78 593 661 21:14:55 -18:11:1 164286 -0:14 0:43 88 5.39 .00 465 444 30 62071 30.0C 79 502 688 21:14:55 -18:11:1 1 164286 -0:13 0:11 88 5.39 .00 465 444 30 62071 30.0C 80 591 672 21:15:1 -18:11:1 1 164286 -0:8 0:43 88 5.39 .00 368 37 185 3013 1.0L 80 591 672 21:15:1 -18:11:1 1 164286 -0:8 0:43 88 5.39 .00 330 97 25 8348 3.0C 81 579 665 21:15:3 -18:9:20 164286 -0:6 2:24 88 5.39 .00 418 214 224 23317 10.0C 82 387 327 21:15:13 -18:11:1 164286 -0:6 2:24 88 5.39 .00 418 214 224 23317 10.0C 83 277 102 21:15:32 -4:43:31 145278 -0:2 0:19 88 5.68 .00 366 178 170 15535 H3.0C 84 265 103 21:15:32 -4:43:31 145278 -0:2 0:26 88 5.68 .00 365 123 20 13655 H3.0C 85 277 99 21:15:36 -4:43:51 145278 0:2 0:2 0:26 88 5.68 .00 40 227 21 33913 10.0C 86 277 99 21:15:37 -4:43:51 145278 0:3 -1:9 88 5.68 .00 258 114 82 7381 1.0L 87 261 96 21:15:32 -4:43:15 145278 0:3 -1:9 88 5.68 .00 258 114 82 7381 1.0L 88 671 818 21:15:56 -21:32:32 145278 0:4 -0:4 88 5.68 .00 258 114 82 7381 1.0L 89 680 871 818 21:15:56 -21:32:32 59 50 21:17:20 -13:40:13 164315 -0:5 2:40 89 7.04 .00 71 71 73 11 2042 3.0C 91 499 500 21:17:20 -13:40:13 164315 -0:5 2:40 89 7.04 .00 71 77 73 12 249? 3.0C	830.000 101.433 53.667 89.400 130.000	930? 1.0L 3043 30.0C 161 L 3.0C 894 L 10.0C	18 18 18	62 6 6	144 106 52 92	.00	7.34	AO	0:12	0: 4	145256	-23:10:56 -9:21:58 -9:21:50 -9:21:7	21:12:29 21:13:34 21:13:52 21:13:57	870 289 299 294	743 392 390 376	69 70 71 72
77	99.667 31.000 40.500	299? 3.0L 310 L 10.0C	207 19 22	7	271 58							-7:36:33 -10:19:6	21:14:20	338	356 395	74 75
81 579 665 21:15:33 -18:9:20 164:266 -0: 6 2:24 88 5.39 .00 418 214 24 23317 10.00 83 277 102 21:15:32 -9:49:24	207.000 2069.033 3013.000 2782.667	621? 3.0L 62071 30.0C 3013 1.0L	270 30 185	26 444 37	465 368	.00	5.39 5.39	88	0:43	-0:14 -0:13	164286 164286	-9:44:32 -18:11:1 -18:11:34	21:14:46 21:14:55 21:14:56	320 661 668	593 602	77 78 79
84 265 103 21:15:32 -4:43:24 145278 -0: 2 0:25 88 5.68 .00 365 123 20 13655 H 3.0C 185 251 99 21:15:36 -4:44:59 145278 0: 3 -1: 9 88 5.68 .00 440 227 21 33913 10.0C 186 277 99 21:15:37 -4:43:56 145278 0: 4 -0: 4 88 5.68 .00 258 114 82 7381 1.0L 187 261 96 21:15:47 -4:43:56 145278 0: 4 -0: 4 88 5.68 .00 258 114 82 7381 1.0L 187 261 96 21:15:45 -4:43:56 145278 0: 4 -0: 4 88 5.68 .00 258 114 82 7381 1.0L 187 261 96 21:15:56 -21:32:32 10: 4 108 189 27 1.0L 187 261 96 287 3: 117:26 132:32 12:17	2331 - 700 244 - 333 5178 - 333	23317 10.0C 733? 3.0C 15535 H 3.0L	24 17 170	214 17 178	418 88	.00	5.39	88	2:24	-0: 6	164286	-18: 9:20 -9:49:24	21:15: 3	665 327	579 387	81
88 671 818 21:15:56 -21:32:32 132 4 108 89? 1.0L 89 682 873 21:17:15 -22:32:25 5 8 216 240? 3.0L 90 459 500 21:17:20 -13:40:13 164315 -0:5 2:40 89 7.04 .00 71 7 31 204? 3.0C 91 711 952 21:17:22 2:24:19:32 59 10 22 294:93:2	4551.667 3391.300 7381.000	13655 H 3.0C 33913 10.0C 7381 1.0L	20 21 82	123 227 114	365 440 258	.00	5.68 5.68 5.68	88 88	0:25	-0: 2 0: 3 0: 4	145278 145278 145278	-4:43:24 -4:44:59 -4:43:56	21:15:32 21:15:36 21:15:37	103 99 99	265 251 277	84 85 86
91 711 952 21:17:22 -24:19:32 59 10 22 294? 3.00	2760.733 89.000 80.000 68.000	89? 1.0L 240? 3.0L	108	8	132							-21:32:32 -22:32:25	21:15:56	818 873	671	89
93 334 265 21:17:33 -8: 7: 6 135 5 102 141? 1.0L	98.000 40.000 141.000	294? 3.0C 120? 3.0L 141? 1.0L	22 344 102	10 6 5	59 366 135	.00	8.80	A 3	0:51	-0: 3	164320	-24:19:32 -11: 0: 3 -8: 7: 6	21:17:22 21:17:30 21:17:33	952 390 265	711	91
94 583 753 21:18:29 -19:41:45 164327 -0: 5 2:43 A0 8.70 .00 69 17 20 577 10.0C 95 595 750 21:18:33 -19:43: 8 164327 -0: 1 1:19 A0 8.70 .00 85 54 24 2143 30.0C 96 444 543 21:19:42 -14:27:42 69 5 40? 135? 10.0C	57.700 71.433 13.500	577 10.0C 2143 30.0C 135? 10.0C	20 24 40?	17 54 5	69 85 69							-19:41:45 -19:43: 8 -14:27:42	21:18:29 21:18:33 21:19:42	753 750 543	583 595 444	94 95 96
97 230 144 21:19:46 -5:12:39 98 390 458 21:20:56 -12:17:35 164359 -0: 3 -1: 4 88 8.30 .00 304 157 34 15527 H 30.00 99 377 462 21:20:60 -12:16:37 164359 0: 1 -0: 7 88 8.30 .00 254 62 24 5035 10.00 100 389 468 21:21: 3 -12:17:40 164359 0: 4 -1:10 88 8.30 .00 136 28 21 1507 H 3.00	7.333 517.567 503.500 502.333	15527 H 30.00 5035 10.00	24	62	304	.00	8.30	88	-0: 7	0: 1	464359	-12:17:35 -12:16:37	21:20:56	458	390 - 377	98

			CAPR	ICORN RA 21:	14 DEC -19	+: 30									
OBJECT NO.	×	٧	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC . TYPE	WAG.	MAG.	PEAK DEN.	NO. OF POINTS	90	DENSITY EXP.8 VOLUME FILTER	DEN. VOL / EXP.
101 102 103	400 486 617	464 624 854	21:21: 5 21:21:14 21:21:15	-12:19:35 -16:16:28	164359 164366	0: 6 -0:21	-3: 4 0:12	88	8.30 8.80	.00	275 96	25 47	201	898 H 1.0L 1820 30.0C	898.000 60.667
104	470 374	629 453	21:21:33	-21:43:53 -16:14:31 -12: 0:27	164366 164372	-0: 1 -0: 9	2: 9 -0:45	AO AO	9.40	.00	57 73 54	9 16 14	26	528 10.0C 309 L 30.0C	7.867 52.800 10.300
106 107 108	415	566 564 561	21:22:39 21:22:43 21:22:55	-14:32:22 -14:28:30 -14:28:31	164378 164378 164378	0: 2 0: 2	-2:46 1:7	0A 0A	6.86 6.86	.00	279 77 106	16 18 37	251 27 46	423 1.0L 610 L 10.0C 1312 L 30.0C	423.000 61.000 43.733
109 110 111	394 391 379	544 554 549	21:24:24 21:24:38 21:24:39	-13:49:27 -13:48:29 -13:48:14	164400 164400 164400	-0:16 -0:2	-1: 8 -0: 9 0: 6	89 89	6.80 6.80	.00	349 155 291	181 34 71	37 23 24	18563 30.0C 1921 3.0C 6113 10.0C	618.767 640.333 611.300
113	402 593	551 960 809	21:24:42 21:27:21 21:27:29	-13:51:39 -23:18:19 -19:35:20	164400 NO	0: 5	-3:19	89	6.80	.00	286 46 48	22	206	933 H 1.0L 104? 30.0C 111 10.0C	933.000 3.467 11.100
115 116 117	504 445 233	906 751 424	21:27:37 21:30: 4 21:30:43	-19:35:60 -17:46:52 -9:57:1	NO 145483	-0:11	-4: 2	89	8.10	.00	57 182 206	27 11 113	25	704 30.00 358? 1.0L 8951 H 30.00	23.467 358.000 298.367
118	218	428 431 433	21:30:55 21:30:55 21:30:58	-9:56:38 -9:55: 2 -9:57:12	145483 145483 145483	-0: 0 0: 0 0: 3	-3:39 -2:3 -4:13	89 89	8.10 8.10 8.10	.00	177 283	48 26 18	18	3025 10.00 922 H 3.0L 735 H 3.00	302.500 307.333 245.000
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1 35 1 36 1 37	174	411	21:35: 9 21:35:11 21:35:13	-9: 0: 7 -8:58:50 -8:59:27	145541 145541 145541	-0: 6 -0: 2	-4:48 -3:32 -4:9	AO AO	8.70 8.70 8.70	.00	225	100 19 37	198 17	5975 H 30.00 512 H 3.0L 1681 H 10.00	199.167 170.667 168.100
1 38 1 39 1 4 0	161 285 293	615 623	21:35:15 21:35:22 21:35:32	-8:59:12 -13:46:55 -13:47:39	145541 164539 164539	0: 0 -0:10 -0: 1	-3:53 -1:22 -2: 6	A0 A0	8.70 8.40 8.40	.00	55 1 35 308	10 93 13	23 267	286 H 3.0C 5614 H 30.0C 399 H 3.0L	95.333 187.133 133.000
141	270 281 408	619 624 869	21:35:32 21:35:35 21:36:37	-13:46:28 -13:46:47 -19:26:39	164539 164539	0: 0 0: 3	-0:54 -1:14	AO AO	8.40	.00	65 65	36 11 13	21	1679 10.0C 336 3.0C 402? 3.0C	167.900 112.000 134.000
145	370 348 369	905 900 902	21:37:40 21:37:40 21:37:41	-17:46: 7 -17:44:16 -17:46:52	164566 1645667 164566	-0: 8 -0: 7 -0: 6	3:32 5:23 2:47	03 83 83	9.30 9.30 9.30	.00	289 148 135	29 48 6	24	986 3.0L 2650 10.0C 146 L 1.0L	328.667 265.000 146.000
147 148 149	360 358 174	797 806 493	21:37:46 21:37:55	-17:44:29 -17:45: 8 -10:30: 6	164566? 164566 164570	-0: 6 -0: 2	5:10 4:31 -3:55	83 83 A0	9.30 9.30 8.00	.00	176 80 89	16	55	9569 H 30.0C 580 3.0C 3028 H 30.0C	285.633 193.333 100 933
150 151 152	174 185 161	493 499	21:37:55 21:37:57 21:37:57	-10:30:6 -10:30:15 -10:31:9	164573? 164570 164570	-0:20 0:3 0:3	-4: 3 -4: 4 -4:57	5A 0A 0A	9.00 8.80 8.80	.00	89 227 74	68 9 23	19 197 18	3028 H 30.0C 225 3.0L 806 10.0C	75.000 80.600
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159 160 161	152	585 587 583	21:43:52 21:43:53 21:43:53	-11:39: 8 -11:39:51 -11:41: 7	164639 164639 164639?	0: 2 0: 3 0: 2	-3:17 -4: 0 -5:16	AC AC	5.43 5.43 5.43	.00	258 120 242	28 34 78	21 20	1265 3.0L 1669 3.0C 6144 10.0C	421.667 556.333 614.400
162 163 164	152	583 580 832	21:43:55	-11:41:44 -11:38:40 -17:29:19	164639 164639 164653	0: 4 0: 9 -0: 6	-5:53 -2:49 2:19	A0 A0 B9	5.43 5.43 8.20	.00	136 319 164	12 171 129	25	350 L 1.0L 19013 30.0C 8395 H 30.0C	350.000 633.767 279.833
165 166 167	288 267 277	839 836 841	21:44:54 21:44:55 21:44:58	-17:28:36 -17:28:48 -17:29: 7	164653 164653 164653	0: 3 0: 4 0: 7	3: 3 2:51 2:31	89 89 89	8.20 8.20	.00	123	15 50 15	500	471 3.0L 2561 10.0C 449 3.0C	157.000 256.100 149.667
168 169 170	149 260 278	902 861 962	21:46:56 21:47:45 21:48: 9	-13: 8:38 -17:34: 5 -18:30: 2					anomari)		227 215	8	18 187 186	110? 30.0C 246? 3.0L 104? 3.0L	3.667 82.000 34.667
171 172 173	34 39 48	540 579 585	21:48:27 21:50:48 21:50:59	-9:55: 0 -10:33:14 -10:33:24	164717 164717	-0: 8 0: 3	-0.22 -0:31	89 89	6.50	.00	56 392 255	267 23	17 18 174	784 3.0L	18.400 1154.100 261.333
174 175 176	24 47 36	582 582 587	21:50:59 21:51: 3 21:51: 3	-10:31:22 -10:34:24 -10:33:18	164717 164717 164717	0: 3 0: 7 0: 7	1:31 -1:32 -0:25	89 89	6.50 6.50 6.50	.00	274 149 130	134 16 66	110	473 1.OL	1194.000 473.000 1171.667

			CETU	S RA 02:44	DEC -14:30									
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7 8 9 10 11	655 594 654 596 595 391	783 785 783 729 727 705	2:23:31 2:23:33 2:23:34 2:23:34 2:23:37 2:27:7	-12:31:6 -12:33:43 -12:32:47 -12:34:23 -12:35:39 -16:50:60	148385 148385 148385 148385 148385	-0: 1 0: 2 0: 2 0: 5	-0:11 -2:48 -1:53 -3:29 -4:45	A0 A0 A0	4.90 4.90 4.90 4.90	.00	191 378 355 269 334 47	9 45 113 68 63 125	19 40 23 79 16 22 17	2647 8.4C 2909.000 12142 8.4C 1445.476 6576 3.0L 2192.000 5519 3.0C 1839.667 13047 10.0C 1304.700 1527 10.0C 15.200
13 14 15 16 17 18	913 177 470 411 412 733 733	691 714 695 696 639 603 601	2:30:7 2:31:57 2:32:16 2:32:25 2:32:44 2:32:48	-9:11:57 -22:22:14 -16:20:17 -16:20:42 -16:20:34 -9:35:51 -9:35:52	NO NO NO 129994 129994	-0:14 -0:10	-1:44 -1:45	AO AO	7.16 7.16	.00	103 141 108 53 57 59	17 21 4 8 12 14 39	75 33 82 20 17 13	404? 3.0L 134.667 1166? 1.0L 1166.000 97 3.0L 32.333 204 8.4C 24.286 357 10.0C 35.700 465 3.0C 155.000 1941 10.0C 194.100
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24 25 26 27 28 29	572 571 513 513 513	561 567 567 568 513 511 585	2:37: 2 2:41:47 2:41:52 2:41:60 2:42: 6 2:42:10 2:42:48	-11:50:55 -14: 4:30 -14: 4:45 -14: 4:42 -14: 4:11 -14: 4:14 -20:35:55	148575 148575 148575 148575 148575 168025	0: 2 0: 8 0:15 0:25 0:25	-0:19 -0:34 -0:32 -0:1 -0:3	85 85 85 85 85	4.39 4.39 4.39 4.39 7.06	.00	320 412 419 337 369 52	117 216 308 178 346 10	12 40 83 22 17 24 16	136? 3.0C 45.333 8899 1.0L 8899.000 19729 2.3.0L 6576.333 35319 8.4C 4204.643 15362 3.0C 5120.667 38604 10.0C 3860.400 282 L 8.4C 333.571
31 32 33 34 35 36 37	200 233 910 504 581 309 262	529 571 454 503 429 458 494	2:43: 9 2:43:51 2:43:58 2:47:31 2:48:25 2:48:39 2:50:37	-20:35:31 -19:56:3 -5:50:58 -14:11:10 -12:31:16 -18:15:18 -20:27:33	168025 NO	0: 8	1:10	AO	7.06	.00	55 51 38 66 41 55 64	13 5 10 6	16 17 12 17 13 12 36	379 L 10.0C 37.900 1402 8.4C 16.667 94? 3.0C 31.333 333? 8.4C 39.643 155? 3.0C 51.667 346? 3.0C 155.333 116 1.0L 116.000
39 40 41 42 43	203 202 261 202 27 738 717	+9+ +9+ +38 +23 3+9 328	2:50:38 2:50:50 2:50:52 2:50:59 2:53:23 2:53:34 2:55:25	-20:26: 1 -20:25:36 -20:27: 5 -20:25:33 -23:52: 6 -9: 8:34 -9:32:27	NO NO NO						95 134 101 46 101	22 7 13 31 5	17 12 75 16 16	947 8.4C 112.738 185 3.0C 61.667 483 3.0L 161.000 1237 10.0C 131.700 1237 10.0C 12.300 6352 3.0C 211.667 1312 3.0C 43.667
46 47 48 49 50	572 ++7 29 28 803 '01 324	324 369 394 340 250 257 307	2:57: 7 2:59:40 3: 0:18 3: 0:30 3: 1: 6 3. 1:12 3: 1:13	-12:33:20 -16:24:43 -23:44:37 -23:42:44 -7:45:32 -9:47: 5 -17:42:11	168249 168249?	0: 7 0:19	4:33 6:26	A3 A3	4.16 4.16	.00	71 76 48 54 105 48 63	13 19 20 5	13 15 37 17 15 16 16	338? 10.0C 33.800 115? 1.0L 115.000 327 L 8.4C 38.929 539 L 10.0C 53.900 852? 10.0C 95.200 140? 10.0C 14.000 1033? 10.0C 103.300
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61 62 63 64 65	285 258 258 168	217 215 270 270 264	3: 9:50 3: 9:53 3: 9:57 3:10:13 3:10:17	-20:44:31 -20:44:36 -20:47:56 -20:47:11 -19:38:0	168376 168376 168376 168376	-0:11 -0:8 -0:3 0:12	3:52 3:47 0:27 1:12	89 89	6.90 6.90 6.90	.00	204 325 134 293 122	100 25 70	14 17 33? 72 70	3687 H 3.0C 1229.000 10816 H 10.0C 1081.600 1455 L 1.0L 1455.000 5465 H 3.0L 1821.667 1083? 3.0L 361.000
66 67 68 69 70 71 72 73	196 194 194 252 345 345 347	232 177 178 232 156 154 210	3:12:49 3:12:49 3:13:8 3:13:24 3:13:24 3:13:37	-20:10:36 -20:10:38 -20: 9:10 -20:11:60 -17: 2:40 -17: 2:45 -17: 1:1	168410 168410 168410 168410 148864 148864 148864	-0:14 -0:12 -0:10 0:9 -0:4 -0:1	1:35 1:33 3:1 0:11 -1:54 -1:60 -1:40	A0 A0 A0 B3 B3 B3	6.86 6.86 6.86 8.20 8.20 8.20	.00	106 116 52 104 170 281 280 271	32 38 11 15 32 56 59	18 17 13 70 15 19 21	1992 8.4C 177.619 1897 10.0C 189.700 328 L 3.0C 109.333 413 L 3.0L 137.667 2016 H 3.0C 672.000 5996 10.0C 599.600 5021 8.4C 597.738 33324 H 3.0L 1114.000
75 75 76 77 78	366 689 692 372 247	139 77 135 114 116	3:14:27 3:15:50 3:15:50 3:16:17 3:17:14	-17: 1: 1 -16: 35: 49 -9: 58: 28 -9: 52: 59 -16: 27: 26 -19: 1: 8	130410 130410 148904	-0: 5 -0: 4	-3:40 1:48	88 88	8.30 8.30 6.97	.00	96 44 60	39 9 4 8	16 17 20 15	1663? 10.0C 166.300 216 L 10.0C 21.600 00 L 8.4C 10.714 20?? 10.0C 26.200 4L9 L 10.0C 46.900
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			GRUS	RA 23:34 T	23:54 DE	C -42:30	10 -40:	30								
NO.	×	Y	R.A.	DEC.	NO.	A. A.	DEC.	SPEC	MAG.	MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EX VOLUME FI	P.& TER	DEN. VOL/ EXP.
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11 12 13 14 15 16 17 18	836 807 793 804 668 659 808 627	702 501 497 498 223 222 413 34	0:15:12 0:21:44 0:21:44 0:22:3 0:23:33 0:23:42 0:26:43 0:28:57	-33:53:43 -37:41:60 -37:41:49 -37:44:48 -44:1:60 -43:58:46 -39:11:51 -47:48:5	192504 192504 192504? 215092 215092	0: 9 0: 8 0:28 -0:12 -0: 3	-0:44 -0:34 -3:32 -4:34 -1:20	89 89 89 A3 A3	7.83 7.83 7.83 3.90 3.90	.00	87 76 165 213 63 46 51	9 19 45 117 30 5 4	22 16 18 22 22 17 21 24	382? 30 661 3 2631 10 9028 30 958 L 30 130 L 10 104? 30 685? 30	. DC	12.733 220.333 263.100 300.933 31.933 13.000 3.467 22.833
19 20 20 20 20 20 20 20 20 20 20 20 20 20	885 821 827 812 936 942 953 953 948 91 146 38	461 342 345 341 358 360 356 373 369 371 405 763 348	0:30:31 0:31:41 0:31:44 0:40:49 0:40:51 0:40:51 0:41:6 0:41:6 22:51:13 22:51:13	-37:38:1 -40:19:56 -40:14:12 -40:15:21 -38:52:50 -38:47:27 -38:26:11 -38:27:24 -38:27:24 -38:31:6 -47:54:25 -40:23:44 -48:58:54	215143? 215143 215143? 192690? 192690? 192690? 192692? 192692? 192692?	0:16 0:19 0:21 0:30 0:32 0:32 0:32 0:32	-7:55 -2:11 -3:20 -8:37 -3:2 -3:13 -2:8 -3:20 -7:2	88 88 80 40 40 88 88 88	7.54 7.54 7.54 6.07 6.07 6.07 .00 .00	00 00 00 00 00 00 10.10 10.10	49 190 64 148 364 98 227 46 113 177 116 43	9 106 19 46 211 55 108 18 66 147 11	15 24 18 18 16 27 515 15	8059 30 627 3 2677 10 25015 30 2477 3 8765 10 438 H 3 3130 H 10 10283 H 30 471? 1	00	80.667 268.633 209.000 267.700 833.831 825.667 876.500 146.000 313.000 342.767 471.000 40.333 56.000
32 33 34 35 36 37	191 158 160 133 103 349	632 375 374 376 374 837	22:56:53 23: 0:11 23: 0:14 23: 0:14 23: 0:24 23: 3:28	-42:50:60 -48: 5:50 -48: 4:52 -48: 4:57 -48: 3:31 -37:59:23	231409 231409 231409 231409	0: 7 0:10 0:10 0:20	1:13 2:11 2:6 3:31	88 88 88	6.72 6.72 6.72 6.72	.00	201 90 233 106 90	39 14 74 37 6	16 108 52 20 16 55	96? 10 1817 3 417 L 1 5889 10 1709 3 165? 1	. DC . DL . DC . DC	9.600 605.667 417.000 588.900 569.667 165.000
39 40 41 42 43	90 280 336 334 310 52 370	753 779 777 780 781 424 681	23: 3:59 23: 4: 0 23: 4: 1 23: 4: 1 23: 4: 3 23:10:37 23:13:29	-39:10:6 -39:12:43 -39:14:39 -39:13:26 -39:13:38 -45:40:48 -40:37:39	214313 214313 214313 214313 214313	-0: 8 -0: 7 -0: 6 -0: 6 -0: 4	-0:19 -2:57 -4:52 -3:40 -3:52	A0 A0 A0 A0	5.59 5.59 5.59 5.59 5.59	.00 .00 .00 .00	163 139 287 317 55	15 49 22 41 88 29 51	17 16 56 117 22 18 18	1013 1	0C 0L 0C	93.700 994.667 1013.000 922.667 812.200 83.000 118.500
45 46 47 48 49 50 51	329 287 286 231 262 79 76 65	527 347 350 348 351 315 309 310	23:15:33 23:15:52 23:15:54 23:15:58 23:16: 1 23:16: 3 23:16: 3	-43:49:14 -47:41:34 -47:41:21 -47:39:55 -47:39:38 -47:44:9 -47:44:16	231542 231542 231542 231542 231542 231542 231542	-0: 6 -0: 5 -0: 1 0: 3 0: 5 0: 4	0:58 1:11 2:37 2:53 -1:28 -1:37	0A 0 A 0 A 0 A 0 A 0 A	6.70 6.70 6.70 6.70 6.70 6.70	.00 .00 .00 .00	58 86 186 97 205 47 174 110	9 6 19 20 45 17	16 54 113 15 18 16 19	290? 10. 161 L 1 782 3. 866 3. 3231 10. 419 L 3.	0C 0L 0L	29.000 161.000 260.667 288.667 323.100 139.667 366.300 308.800
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56 57 58 59	470 531 370 300	840 830 935 191	23:20:12 23:21: 3 23:23:15 23:24:26	-36:31:37 -36:35:56 -34: 4:21 -50:25: 9	214517 247880	-0:14 0:3	2:53	88	10.50	10.78	53 90 104 140	7 5 13 36	16 55 49 52	143? 1 458? 1	. 0C . 0L . 0L	66.667 143.000 458.000 1675.000
60 61 62 63 64 65 66	299 244 275 485 453 289 327 476	193 191 194 614 586 656 315 625	23:24:29 23:24:31 23:25:23 23:25:52 23:26:36 23:28:15 23:29:12	-50:26:18 -50:24:32 -50:24:44 -41: 0:39 -41:37:58 -39:42:42 -47:29:6	247880 247880 247880	0: 6 0: 7 0: 8	-0:20 1:26 1:14	88 88 88	6.34 6.34 6.34	.00	292 207 378 179 59 46 44	68 55 96 9 8	105 15 19 127 16 19 17	4734 H 3 4095 H 3 11030 10 283? 3 261? 10 100? 10 93? 3	. OL	1578.000 1365.000 1103.000 94.333 26.100 10.000 31.000
68 69 70	358 429 558	926 722	23:29:49 23:29:51 23:30:18	-49:19:56 -33:38:24 -38: 8:12	231652?	0:12	9:34	A5 89	9.30	9.90	148 51 434	285	105	154?H 3 122? 3	. OC . OC	51.333 40.667 3285.200
71 72 73 74 75 76 77 78	348 356 529 363 376 585 583 378	714 719 719 719 720 719 721 305	23:30:19 23:30:19 23:30:23 23:30:24 23:30:25 23:30:28 23:31:13	-38: 9:57 -38:10:28 -38: 9:29 -38: 9:29 -38: 8:58 -38: 6:9 -38: 6:51 -47:31:49	214615 214615 214615 214615 214615 214615 214615	0: 1 0: 4 0: 5 0: 6 0: 7	-4:15 -4:45 -3:47 -3:36 -3:15 -0:26 -1: 9	89 89 89 89 89	4.46 4.46 4.46 4.46 4.46 4.46	.00	436 483 324 345 357 317 412 57	282 538 135 132 69 76 137	21 32 19 19 59 60 126 16 24	76689 30 12034 3 12629 3 6308 1 6420 1 12290 3 3027 10	. 0C . 0C . 0C . 0L . 0L . 0L	3286.100 2556.300 4011.333 4209.667 6308.000 6420.000 4096.667 30.200
79 80 81 82 83 84 85 86 87 88	499 449 290 295 295 281 281	810 501 501 490 495 495 491 491 502	23: 31: 30 23: 32: 15 23: 32: 16 23: 32: 16 23: 32: 18 23: 32: 18 23: 32: 18 23: 32: 18 23: 32: 18	-35:59:49 -42:53:51 -42:52:35 -42:52:35 -42:51:4 -42:51:4 -42:51:10 -42:51:10	231672? 231675 231675? 231675 231672? 231672? 231675? 231675?	0: 6 -0: 8 0: 7 -0: 7 0: 9 -0: 5 0: 9	3:48 -0:21 5:55 6:36 6:29 2:20	SA S	6.86 4.80 6.86 4.80 6.86 4.80 6.86 4.80	.00	52 52 168 168 60 60 129 129 159	8 8 84 13 13 13	15 15 24 15 15 17 17 17	225	. 0C . 0C	5.600 75.000 75.000 190.067 190.067 130.333 130.333 181.200 181.200 44.333
99 90 91	504 504 480 480	502 503 503	23:32:25 23:32:25 23:32:25	-42:52:58 -42:53:45 -42:53:45	231675 231672? 231672?	0:15 0:16 0:2	0:32 3:55 -0:14	SA SA SA	4.80 6.86 4.80	.00	159 133 133	26 26	18	133 L 3 1481 10 1481 L 10	. OC . OC	44.333 148.100 148.100
92 93 94 95 96 97 98 99	434 465 411 441 250 265 265 262 356 653	827 366 364 367 348 352 348 234 832	23: 33: 57 23: 34: 59 23: 34: 59 23: 35: 3 23: 35: 7 23: 35: 15 23: 35: 15 23: 35: 33 23: 37: 10	-35:24: 8 -45:46:21 -45:48: 7: 1 -45:46:40 -45:46: 8 -45:45:45 -48:40:35 -34:54:45	231707 231707 231707 231707 231707 231707	-0:11 -0:11 -0:7 -0:3 0:5	-0:12 -1:56 -0:52 -0:31 0:1 0:24	5A 5A 5A 5A 5A	4.86 4.86 4.86 4.86 4.86 4.86	.00 .00 .00 .00	69 165 64 141 126 62 179 43	11 13 10 29 36 13 88	23 117 14 16 17 15 23 14	333 L 3 1592 L 10 1921 L 10 411 L 3 6351 L 30 98? 3	. OC . OC . OC	11.700 137.667 111.000 159.200 192.100 137.000 211.700 32.667 56.333

			GRUS	RA 23:34 TO	23:54 DEC	-42:30	10 -40:	30						
OBJECT NO.	×	¥	R.A.	DEC.	NO.	A.A.	DEC.	SPEC	MAG.	MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. DEN. VOL/ VOLUME FILTER EXP.
101 102 103 104 105 106 107 108 109 110 111 112 113 114	508 286 479 467 695 725 749 537 511 525 473 674 235	923 322 774 711 823 826 825 825 820 823 277 632 89	23:37:43 23:38:55 23:39:58 23:40:39 23:41:20 23:41:51 23:41:51 23:41:56 23:41:56 23:41:56 23:41:56 23:41:56 23:41:56	-32:59:22 -46:10:31 -36: 0:26 -37:21:13 -34:40:40 -34:44:39 -34:45:16 -34:47: 7 -34:46:20 -34:46:20 -34:46:20 -34:46:20 -34:46:20 -34:46:20 -34:46:20 -34:46:20 -33:446:20	20 20 20 20 20 20 20 20 20 20 20 20 20 2	-0:18 -0:17	-1:44 -3:26	85 85	5.37 5.37	.00	91 61 55 54 55 123 168 87 187 69 37 181 464	15 10 8 11 17 55 31 11 47 111 16 6 6 159 216	25 13 23 14 17 18 113 53 20 25 15 126 25? 18	619? 30.0C 20.633 328? 30.0C 109.333 216? 30.0C 7.200 340? 30.0C 113.333 493 3.0C 113.333 294 3.0C 260.000 10.0C 260.000 8098 30.0C 269.933 584 3.0C 269.933 4658 10.0C 269.933 46588 10.0C 4658.6ED
116 117 118 119 120 121 122 123 124	249 440 440 261 384 326 591 424	91 114 117 95 115 241 302 324	23:44:22 23:44:25 23:44:27 23:44:27 23:44:27 23:44:57 23:46:57 23:51:29 23:52:29	-50:29:30 -50:28:36 -50:29:5 -50:28:5 -50:33:28 -50:29:26 -47:18:41 -45:36:8	248018 248018 248018 248018 248018 248018	-0:15 -0:15 -0:12 -0:10 -0:10	0:44 1:38 1:2 2:9 -3:14 0:49	85 85 85 85 85 85	5.37 5.37 5.37 5.37 5.37 5.37	.00	453 464 364 445 409 362 45 150 86	900 968 176 285 73 210 10	21 25 57 111 50? 18 13 116	53393 10.0C 5339.300 93407 30.0C 3113.567 19493 H 1.0L 19493.000 35240 H 3.0L 11746.667 17017 1.0L 17017.000 2737 3.0C 7693.000 2737 3.0C 91.000 3647 3.0L 121.333 2997 1.0L 299.000
125 126 127 128 129 130 131 132 133	686 686 673 673 659 659 665 665 628	895 895 893 893 889 889 890 890	23:52:41 23:52:42 23:52:42 23:52:46 23:52:46 23:52:46 23:52:46 23:52:46 23:52:46	-32: 5:39 -32: 5:39 -32: 6: 6 -32: 6: 6 -32: 6: 6 -32: 6:22 -32: 8:51 -32: 8:51 -45: 3: 6	214860/ 214861/ 214861/ 214861/ 214861/ 214861/ 214861/	-0: 1 -0: 1 0: 0 -0: 0 0: 4 0: 4 0: 4	6:20 4:6 5:53 3:39 5:37 3:23 3:8 0:54	83 A 83 A 83 A	6.05 6.73 6.05 6.73 6.05 6.73 6.05 6.73	.00	225 225 323 323 433 433 482 482 482	98 98 117 117 223 223 431 431	52 52 20 20 24 24 30 30	6688 1.0. 6688.000 6688 1.0. 6688.000 12615 3.0C 4205.000 12615 3.0C 4205.000 30818 10.0C 3081.800 73039 30.0C 24 34.633 3967 1.0L 396.000
134 135 136 137 138 139 140 141	585 497 721 751 776 559 565 551 457	637 417 523 526 525 526 530 525 271	23:56: 3 23:56:51 23:57:35 23:57:35 23:57:45 23:57:47 23:57:49 23:57:52 23:59:47	-37:21:35 -42:21:45 -39:39:28 -39:39:51 -39:40:31 -39:45:20 -39:41:53 -39:43:36 -45:27:15	231876 214911 214911 214911 214911 214911	0: 5 -0:14 -0:11 -0: 1 0: 1 0: 2 0: 6	-1:40 1:10 0:47 0:8 -4:41 -1:15 -2:58	89 85 85 85 85 85	8.50 10.20 10.20 10.20 10.20 10.20	8.90 10.00 10.00 10.00 10.00 10.00	101 47 49 95 160 98 44 93	11 7 8 25 9 62 4 24	17 19 14 17 118 20 15 16 22	495? 10.0C 49.500 179?\(30.0C 5.967 225 3.0C 75.000 1996 10.0C 109.600 276 3.0L 92.000 2872 430.0C 95.733 113 L 3.0C 37.667 1068 10.0C 106.800 630? 30.0C 21.000
			PAVO	RA 21:14 DE	EC -52:12									
123456789	536 545 285 323 366 358 135 388 540	56 68 213 115 205 222 355 233 164	20:21:33 20:22:27 20:25:46 20:27:20 20:29:48 20:29:42 20:33:36 20:34: 8 20:34: 7	-56:54:37 -56:51:32 -51:5:15 -56:14:46 -52:39:47 -52:14:56 -47:8:2 -52:52:9 -56:13:21	246574 246574	-0: 9 0:44	-0:47 2:18	83 83	2.12	.00	511 511 52 85 80 169 44 92 52	997 1705 6 8 9 7	20? 125? 15 54 16 121 16 15	333700 3.0C111233.333 322894 H 3.0C1107631.333 185? 3.0C 61.667 209? 1.0L 209.000 335? 3.0C 111.667 226? 3.0L 75.333 101? 3.0C 533.667 1601? 3.0C 533.667 123? 3.0C 41.000
10	242 317 327	368 334 340	20:40:31 20:41:19 20:41:20	-48:58:59 -50:40:19 -50:39:58	246715 246715	-0: 3 -0: 2	-0: 9 0:12	A0 A0	7.49	.00	75 183	14 15	16 17 125	94? 3.00 31.333 492 3.00 164.000 548 3.0L 182.667
13 14 15 16 17 18	743 708 718 713 530 540 695	105 136 142 143 242 247 183	20:42:56 20:44:48 20:44:50 20:44:58 20:45: 9 20:45:10 20:50:21	-60:17:24 -59:25:60 -59:27:21 -59:26:43 -55:22:38 -55:24:2	246736 246736 246736 246739 246739	-0: 5 -0: 2 0: 5 -0: 7 -0: 6	-0:50 -2:12 -1:34 1:5 -0:19	A0 A0 A5 A5	7.41 7.41 7.41 10.16 10.16	.00	52 66 193 79 45 173 72	5 26 48 12 6 13	15 16 120 48 16 128 16	1352 3.0C 45.000 859 3.0C 286.333 1965 H 3.0L 655.000 119 H 3.0C 49.667 388 H 3.0L 129.333 6522 3.0C 217.333
20 21 22 23 24 25	362 372 368 210 399 551	394 400 402 511 385 336	20:50:59 20:51: 1 20:51: 5 20:52:34 20:52:35 20:57:13	-50:54:42 -50:54:16 -50:53:48 -46:58:25 -51:39:58 -54:48:32	246786 246786 246786	-0: 2 -0: 0 0: 4	0:23 0:48 1:16	89 89	6.46 6.46 6.46	.00	273 377 229 80 48 96	53 57 34 4 6	136 59 52 16 55	4277 3.0C 1425.667 4275 3.0L 1425.000 2213 1.0L 2213.000 1017 1.0L 101.000 1577 3.0C 52.333 2397 1.0L 239.000
26 27 30 31 32 33 34 35 36 37 38 40 41	353 353 343 243 253 250 123 117 125 744 157 467 533 839	537 539 532 599 605 607 699 707 284 716 528 491 285	20:59: 0 21: 4:31 21: 4:43 21: 4:43 21: 4:44 21: 4:44 21: 6:46 21: 6:47 21: 6:47 21: 8:13 21: 13:51 21:16:36	-43:16:33 -49:8:17 -49:8:21 -49:7:29 -46:40:37 -46:39:58 -46:40:4 -43:32:33 -43:28:42 -43:30:8 -58:44:19 -58:44:19 -51:16:9 -52:48:18	230536 230536 230536 230538 230538 230538 230548 230549 230555 230555 230555	0: 4 0: 9 0:15 0: 5 0: 7 0:10 -0: 7 -0: 6 0: 4	0:13 0:9 1:1 1:5 1:44 1:38 -3:50 6:29 5:44 5:3	A0 A0 A0 A0 A0 A0 B9 B9	6.84 6.84 7.23 7.23 7.23 8.50 6.90 6.90 6.90	.00 .00 .00 .00 .00 .00 .00 .00	132 225 101 95 69 193 83 74 200 99 68 63 182 98	1791195662995878	106 137 58 18 127 555 47 107 18 50 15 132 55 15	99? 3.0L 33.000 285 1.0L 285.000 948 3.0C 285.000 477 L 3.0C 159.000 477 L 3.0C 159.000 151 1.0L 18.000 151 1.0L 18.000 151 1.0L 562.000 162 3.0C 566.67 1764 3.0C 568.000 1662? 3.0C 566.667 279? 3.0C 56.667 279? 3.0C 56.667 279? 3.0C 56.667
43 45 45 46 47 49 50	280 924 547 317 894 542 884 389 383	742 288 587 838 370 661 387 809 830	21:19:45 21:24:48 21:25:24 21:31:38 21:31:48 21:32:29 21:33:4 21:34:4 21:35:35	-45: 42: 26 -61: 38: 39 -51: 54: 1 -45: 12: 9 -60: 9: 9 -50: 55: 31 -59: 47: 11 -46: 43: 36 -46: 20: 43	230769?	-0:21	-1:17	89	9.60	9.60	84 48 84 148 137 106 102 85 233	6 4 17 9 8 7 36	55 14 58 124 53 62 51 55	1037 1.0L 103.000 1657 3.0C 55.000 937 1.0L 93.000 917 3.0L 30.333 7727 1.0L 772.000 2947 1.0L 294.000 2797 1.0L 279.000 1777 1.0L 177.000 1864 H 3.0L 621.333

			PAVO	RA 21:14 DE	C -52:12									
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC .	MAG.	MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN.VOL/ VOLUME FILTER EXP.
51 52 53 54 55 56 57 58 59	383 380 380 372 372 639 560 659 664	830 832 832 825 825 658 732 665 665	21:35:35 21:35:36 21:35:36 21:35:36 21:42:13 21:42:13 21:42:21 21:43:45	-46:20:43 -46:19:32 -46:19:47 -46:19:47 -52:33:10 -50:22:52 -52:40:59 -52:45:45	230770? 230769? 230770? 230769? 230770?	-0:34 -0:20 -0:33 -0:20 -0:33	-5: 8 -0: 5 -3:57 -0:21 -4:12	A0 89 A0 89 A0	9.00 9.60 9.00 9.60 9.00	9.40 9.60 9.40 9.60 9.40	233 100 100 84 84 52 42 193 171	36 17 17 26 26 4 4	131 56 56 :8 18 17 17 138 (38	1864 H 3.0L 621.333 513 1.0L 513.000 998 H 3.0C 332.667 998 H 3.0C 32.667 1137 3.0C 37.667 947 3.0C 37.667 347 3.0C 37.667 347 3.0C 37.667 347 3.0C 37.667
60 61 62 63 64 65 66	670 811 801 808 675 903 894 523	663 552 546 552 663 508 532 885	21:45:33 21:45:35 21:45:39 21:45:40 21:46:0 21:49:41 21:51:23 21:52:3	-52:58:34 -56:31:15 -56:31:27 -56:31:17 -53: 3:115 -58:31:15 -58: 2:50 -47:51: 3	247190 247190 247190	0:10 0:14 0:15	-0:50 -1: 3 -0:53	89 89 89	6.74 6.74 6.74	.00	77 282 181 126 62 92 152 196	7 44 40 26 6 7 6	20 126 18 55 22 51 118 129	248? 3.0C 82.667 2862 3.0L 954.000 2510 3.0C 836.667 1045 1.0L 1045.000 159? 3.0C 53.000 211? 1.0L 211.000 173? 3.0L 57.667 492? 3.0L 164.000
68 69 70 71 72 73	955 849 839 846 557 734	509 627 621 627 973 802	21:54:31 21:57:11 21:57:16 21:57:22 22: 3: 9 22: 3:29	-59:12:59 -56: 6:41 -56: 6:58 -56: 5:27 -47:15:19 -52: 3:50 -47:24:17	247262 247262 247262	0:11 0:15 0:21	0:43 0:25 1:57	88 88	6.21 6.21	.00	141 260 171 114 184 151	53 47 29 4	115 122 19 56 125? 123 125?	957 3.0L 31.667 3296 3.0L 1098.667 2992 3.0C 997.333 1024 1.0L 1024.000 2347 3.0L 78.000 957 3.0L 31.667 3957 3.0L 131.667
74 75 76 77 78 79 80 81	569 566 568 557 766 685 675 742	974 980 982 981 835 944 938 928	22: 4:21 22: 4:43 22: 4:57 22: 5:19 22: 9:28 22:11:52 22:11:59 22:17:11	-47:18:25 -47:18:13 -47:13:58 -52: 6:12 -49:28:54 -49:29: 3 -50:35:29	NO 8 30995 5 30995 5 30995	-0:23 -0:8 0:13	-6:10 -5:58 -1:43	85 85 85	2.16 2.16 2.16	.00	206 80 271 307 150 159 46 62	159 662 269 4 33 9	55? 125? 20? 123 124 21	714 1. 0l. 714.00 13157 L 3. 0l. 4385.667 23513 L 3. 0c 7837.667 967 3. 0l. 31.667 981 3. 0l. 293.667 200 3. 0c 66.667 1787 3. 0c 59.333
			MENS	A RA 05:50 (DEC -74:00									
1 3 4 5 6 7 8 9	256 269 237 332 177 176 243 171 241	903 904 877 926 822 824 954 806 846	3:26: 8 3:28: 3 3:30:15 3:35: 5 3:35: 5 3:36: 7 3:38:22 3:40:30	-77: 9:17 -76:55:47 -77:47:41 -75:34: 7 -79:27:21 -79:28:10 -77:57:47 -79:43:55	NO 255988? NO NO	2:16	-0:37	AO	6.89	.00	163 124 108 131 164 65 110	16 5 27 15 4 8 12	83 90 76 87 66 29 74 66	642 30.0C 21.400 121 L 30.0C 4.033 1347 30.0C 4.467 8387 30.0C 27.933 695 30.0C 23.167 123 10.0C 12.300 2227 30.0C 7.400 2707 30.0C 9.000
10 11 12 13 14	512 513 511 514 531 259	981 981 978 982 975 835	3:40:48 3:44:46 3:44:49 3:44:50 3:44:52 3:47:29 3:47:32	-78: 4:39 -71:47: 8 -71:46:56 -71:47:57 -71:47: 5 -71:27:41 -77:53: 0	256025 256025 256025 256025	-0:53 -0:49 -0:48 -0:47	1:39 1:51 0:50 1:41	A0 A0 A0	6.54 6.54 6.54 6.54	.00	113 343 99 428 249 128 130	123 30 840 484 4	93? 140? 99	11579 H 10.0C 1157.900 835 H 1.0L 835.000 23433 H 30.0C 781.1ED 4367 H 3.0L 1455.7ED 1037 30.0C 3.433 1877 30.0C 6.233
16 17 18 19 20 21	276 301 275 300 300 537 283	844 861 846 859 855 969 838	3:47:45 3:47:50 3:47:52 3:47:52 3:48:16 3:49:13 3:51:45	-77:28:24 -76:54:60 -77:29:12 -76:54:32 -76:55:56 -71:24:40 -77:25:33	NO 256028 NO 256028 256028	-0: 8 -0: 6 0:17	-2:54 -2:26 -3:51	88 88	8.12 8.12	.00	120 194 58 167 341 137 73	28 29 5 55 100 8	85 141 36 36 85 95 35	713 30.0C 23.767 985 3.0L 328.333 106 10.0C 10.600 3093 10.0C 309.300 8663 30.0C 288.767 236? 30.0C 7.867 1077 10.0C 10.700
23 24 25 26 27 28 29 30 31 32 33	561 570 553 562 359 604 648 264 294 296	943 940 934 929 841 942 961 791 804 794 857	3:57:47 3:58:32 3:59:7 4:0:19 4:0:49 4:1:21 4:2:8 4:3:34 4:7:18 4:7:18	-71:12:13 -71: 2:13 -71: 2:5:42 -71:17:46 -75:59: 3 -70:22: 6 -69:23:47 -78:12:37 -77:32:11 -77:35:37 -73:53:31	256053? 256053	-1:54 -0:46	-7:22 0:34	A 0 A 0	6.72 6.72	.00	96 140 103 143 118 121 177 115 152 128 191	104 7 191 24 8 5 4 8	39 96 96 88 94 145 87 87	41177 10.0C 411.760 2107 30.0C 7.000 7951 10.0C 795.100 750 23.0 C 25.000 2037 30.0C 6.767 1907 30.0C 6.333 1257 3.0C 41.667 1167 30.0C 10.633 1687 30.0C 10.633 1687 30.0C 5.600
34 35 36 37 39 40 41 42 43	602 817 688 440 353 175 445 606 316 611	897 978 875 788 760 699 767 809 730 808 763	4:11:28 4:12:19 4:22:40 4:24:52 4:25:29 4:26:57 4:31:31 4:32:11 4:32:11 4:32:15	-70:47:8 -65:59:58 -69:16:3 -74:48:52 -76:44:53 -80:35:37 -74:50:52 -71:18:39 -77:40:43 -71:12:53 -74:57:2	NO LMC LMC						90 74 257 116 117 107 126 109 113 127	17 17 5 7 8 85 7 8	39 35 150 93 87 68 93 66 79 68 89	581? 10.0C 58.100 912? 3.0L 304.000 1037 30.0C 3.433 1707 30.0C 5.667 19007 30.0C 7.667 19007 30.0C 63.333 232? 1.0L 232.000 211? 30.0C 63.333 3097 1.0L 308.000 172? 30.0C 5.733
46 47 48 49 50	446 199 452 199 92 211	761 691 760 692 658 691	4:33:17 4:33:49 4:34:4 4:34:38 4:35:10 4:35:14	-74:51:35 -80:10:45 -74:44:35 -80:10:28 -82:24:50 -79:56:16	NO						137 115 154 67 103 118	31 10 51 8	91 66 89 34 66 66	9387 30.0C 31.267 346 30.0C 11.533 19167 30.0C 63.867 2117 10.0C 21.100 1397 30.0C 4.633 1757 30.0C 5.833

OBJECT	×	*	MENS.	A RA 05:50 (DEC -74:00	Δ	Δ	SPEC	v	ρ	PEAK	NO. OF	80	DENSITY EXP. B DEN. VOL/
NO.				occ.	NO.	R.A.	DEC.	TYPE	MAG.	MAG.	DEN.	POINTS	80	VOLUME FILTER EXP.
51 52 53 54 55 56 57 58	514 513 203 208 279 837 279 271	769 771 691 689 709 852 712 706	4:35:27 4:35:32 4:35:34 4:35:49 4:35:52 4:35:57 4:36:9	-73:25:35 -73:26:14 -80: 5:58 -80: 0:31 -78:31:38 -66:27:6 -78:31:3	NO LMC NO LMC NO						184 94 77 145 159 126 74	11 8 6 53 27 18 9	88 37 45 65 81 93 37 82	564 30.0C 18.800 281 10.0C 26.100 157? 10.0C 14.700 2682? 30.0C 89.400 1160 30.0C 89.400 173? 30.0C 15.767 248 10.0C 24.800 92? 30.0C 3.067
59 60 61 62 63 64 65 66	462 462 725 725 217 215 114 113	752 754 810 812 685 688 655 656	4:36:54 4:37:9 4:37:45 4:38:4 4:38:40 4:38:57 4:40:51	-74:35:44 -74:33:56 -68:53:33 -68:53:16 -79:52:2 -79:53:51 -82: 0:33 -82: 1:25	NO NO LMC 249073 249073 NO NO	-0:36 -0:.7	0:60 1:17	A0 A0	8.13 8.13	.00	145 62 251 112 116 54 128 69	52 33 22 4	86 36 95 41 72 33 61 28	733 30.00 24.433 94 10.00 9.400 3471 30.00 115.700 1284 10.00 128.400 7392 30.00 24.633 80 10.00 8.000 551 30.00 18.367 213 10.00 21.300
67 68 69 70 71 72 73 74	64 65 532 632 634 633 639 386	641 642 764 764 765 761 760 709	4:41: 7 4:42:27 4:43:35 4:43:40 4:43:51 4:43:51 4:44:25	-83: 3:10 -83: 1:37 -71: 1:7 -71: 1:17 -71: 0:5 -71: 0:55 -70:53:48 -76:21:56	NO NO 256122 256122 256122 256122 256122?	0: 2 0: 7 0: 9 0:18 0:52	0:16 0:6 1:15 0:28 7:35	89 89 89 89	5.69 5.69 5.69 5.69 5.69	.00 .00 .00 .00	187 68 309 425 433 432 127 116	16 56 167 81 294 8	72 32 69 41 162 90 91 82	972 30.00 32.400 113 10.00 11.300 1784 1.0L 4784.000 16736 10.00 1673.600 7582 3.0L 2527.333 31654 30.00 1055.133 235 L 30.00 7.833 2197 30.00 7.300
75 76 77 78 79 80 81 82	352 671 703 263 696 711 723 484	699 758 761 677 756 756 756 712	4:45:60 4:46:17 4:47:6 4:47:15 4:47:57 4:46:38 4:49:10 4:49:35	-77: 6:22 -70:14:44 -69:34:43 -79: 1: 4 -69:44:29 -69:26: 2 -69:11:18 -74:19:40							103 152 130 110 131 138 153 106	16 8 12 20 7 11	96 104 77 101 113 113	104? 30.0C 3.467 579? 30.0C 19.300 182? 30.0C 6.067 296? 30.0C 9.867 497? 30.0C 16.233 1582 30.0C 5.267 360? 30.0C 12.000 2582 30.0C 8.600
83 84 85 86 87 88	719 792 793 719 683 694 728	752 768 770 754 743 745 752	4:49:41 4:49:49 4:49:57 4:50:14 4:50:14 4:50:18	-69:16:53 -67:44:30 -67:42:39 -69:16:28 -70: 3:11 -69:49:12 -69: 6: 2	NO FWC	0:50 0:57	3:23 5:14	SA	7.79 7.79	.00	213 214 93 89 145 179 146	120 88 36 4 8	119 100 42 67 107 124 119	4965 30.0C '55.500 4570 H 30.0C 152.333 1250 H 10.0C 155.000 81 10.0C 8.100 248? 30.0C 8.267 703 30.0C 23.433 997 30.0C 3.300
90 91 92 93 94 95 96 97	694 684 711 712 711 840 677 684	747 742 744 747 746 769 735 736	4:50:20 4:51:6 4:51:12 4:51:13 4:51:18 4:51:38 4:51:52 4:51:55	-69:48:34 -70: 1:58 -69:28:28 -69:27:47 -69:27:55 -66:47: 5 -70:13:33 -70: 4:42	NO LHC NO LHC NO LHC						90 112 364 216 178 151 133 141	9 25 1063 62 169 34 16	51 128 172 63 106 107	218 10.0C 21.800 870 10.0C 87.000 59875; 30.0C 1995.833 1881 3.0L 627.000 8491 10.0C 849.100 1078; 30.0C 12.333 370; 30.0C 12.333 405 30.0C 16.167
98 99 100 101 102 103 104	813 814 548 740 656 778 682	761 762 727 743 727 750 731	4:52:6 4:52:25 4:52:35 4:52:35 4:52:40 4:52:43 4:52:48	-67:21:31 -67:19:52 -70:51: 6 -68:54:12 -70:40:59 -68: 6:15 -70: 8: 1	NO LMC						167 73 130 156 115 195 157	12 11 20 16 5 36 37	114 92 122 92 110 118	443 30.0C 14.767 244 10.0C 24.400 5367 30.0C 17.867 4127 30.0C 13.733 1107 30.0C 3.667 7344 30.0C 57.800 7347 30.0C 26.467
105 106 107 109 110 111	778 832 670 832 832 698 686 658	752 761 728 763 763 734 727 722	4:53: 1 4:53: 2 4:53: 5 4:53: 5 4:53: 5 4:53: 19 4:53:56 4:54: 0	-68: 5:49 -66:58:29 -70:23:28 -66:59:12 -66:57:51 -69:47:24 -70: 3:53 -70:39:33	NO LMC NO LMC NO LMC						87 308 150 190 140 77 161 164	14 333 19 5 67 6 5	50 114 106 169 63 54 123 104	384 10.0C 38.400 19255 30.0C 641.833 584? 30.0C 19.467 100 3.0L 33.333 2425 10.0C 242.500 130? 10.0C 13.00 143? 30.0C 4.767 1531? 30.0C 51.033
113 114 115 116 117 118 119	671 725 686 724 739 763 763	724 735 728 734 734 739 741	4:54:3 4:54:16 4:54:16 4:54:21 4:54:23 4:54:23	-70:23: 3 -69:15:12 -70: 3:26 -69:15:18 -68:57: 3 -68:26:42 -68:26: 3	NO LMC NO LMC NO LMC NO LMC NO LMC						138 208 88 159 143 174 76	10 65 4 35 5	105 183 54 78 130 122 52	2912 30.0C 9.700 94 3.0L 31.333 268 10.0C 26.800 2325 10.0C 252.500 457 30.0C 1.500 925 30.0C 30.833 108 10.0C 10.800
120 121 123 124 125 126 127	704 823 676 821 821 772 687 670	730 753 722 749 751 737 722 719	4:54:31 4:54:40 4:54:45 4:55:1 4:55:1 4:55:14	-69:40:47 -67:11:56 -70:17:16 -67:14:6 -67:13:27 -68:16:0 -70: 3:39 -70:25:17	NO LMC NO LMC LMC						92 196 141 309 138 175 156 153	16 27 14 97 108 13 6	54 166 113 115 52 125 124 114	441? 10.00 44.100 686 3.0L 228.667 323? 30.00 10.767 6381 30.00 425.400 456? 30.00 425.400 456? 30.00 5.967 1008? 30.00 5.967
128 129 130 131 132 133	806 645 689 291 677 858 858	744 714 718 660 715 749 750	4:55:16 4:55:29 4:55:59 4:56:3 4:56:15 4:56:22 4:56:23	-67:33:15 -70:57:15 -70: 1:45 -78:31:24 -70:17:11 -66:30:12 -66:29:19	256143 NO LMC NO LMC	0:21	-2:34	A 0	8.25	.00	151 142 161 127 142 439	41 54 17 17 24 780 45	107 93 129 75 116 115 76	12437 30.0C 41.433 16917 30.0C 56.367 4337 30.0C 14.433 584 L 30.0C 14.433 4907 30.0C 16.333 70948 30.0C 2564.933 1222 1.0L 1272.000
135 136 137 138 139 140	957 959 108 716 926 716 716	751 751 624 720 741 722 722	4:56:24 4:56:27 4:56:32 4:56:32 4:56:37 4:56:37	-66:30:47 -66:29:37 -82:14:59 -69:27:57 -67:10:30 -69:27:17 -69:28:34	NO LHC NO LHC NO LHC NO LHC						284 256 93 371 149 179 224	321 126 9 508 18 280 57	62 172 62 128 110 64 181	1851.5 10.0C 1851.500 5435 3.0L 1811.667 223? 30.0C 1551.867 5507 30.0C 1551.867 5507 30.0C 1351.894 10.0C 1389.400 1708 3.0L 569.333 103? 30.0C 3.433
142 143 144 145 146 147 148	939 763 909 763 747 650 765 821	742 726 735 728 725 706 728 734	4:56:59 4:57: 4 4:57: 9 4:57:16 4:57:27 4:57:31 4:57:40	-66:54:33 -68:28:58 -67:32:17 -68:28:18 -58:48:36 -70:52:23 -68:27:17 -67:17:43	NO LHC						163 367 157 183 86 139 214 169	180 17 49 10 114 28	105 129 55 57 97 168	1969 30.00 98.967 3127 30.00 10.400 2913 10.00 291.300 2447 10.00 24.400 30897 30.00 102.967 910 3.01 303.333 43497 30.00 144.967
150	717	717	4:57:50	-69:26:58							151	14	81	4417 13.0C 44.100

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			MENS	A RA 05:50	DEC -74:00									
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	Δ DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN.VOL/ VOLUME FILTER EXP.
151 152 153 154 155 156	704 801 704 695 696 872	715 730 712 713 710 742	4:57:51 4:57:53 4:57:59 4:57:60 4:58:11 4:58:12	-69:43:26 -67:43: 1 -69:44:17 -69:54:57 -69:54:34 -66:15:33	NO LMC NO LMC NO LMC NO LMC						97 166 222 79 186 174	10 74 58 13 87	71 114 126 54 125 143	211 10.00 21.100 2381? 30.00 79.367 3121 30.00 104.033 296 10.00 29.600 2945 30.00 98.167 1077 30.00 3.567
157 158 159 160 161 162 163	810 872 822 473 746 707 894	729 740 729 679 714 708 743	4:58:23 4:58:25 4:58:46 4:58:55 4:58:57 4:59: 3	-67:32: 7 -66:15:43 -67:17:22 -74:39:60 -68:53:10 -69:41:17 -65:49:24	NO LMC						155 169 148 189 210 162 190	20 24 7 29 80 10	113 143 113 75 126 125 167	5962 30.0C 19.867 1932 30.0C 6.433 2042 30.0C 6.800 1567 30.0C 52.233 34777 30.0C 115.900 2932 30.0C 9.767 1233 3.0L 41.000
164 165 166 167	672 889 799 472	702 739 722	4:59:16 4:59:19 4:59:20 4:59:21	-70:25:46 -65:55:16 -67:46:42 -74:40:44	NO LMC						146 282 137	315	114	159? 30.0C 5.300 17692 30.0C 589.733 73? 30.0C 2.433
168 169 170	704 654	680 741 706 698	4:59:23 4:59:25 4:59:35	-65:54:36 -69:45:21 -70:50: 5	NO LMC						66 124 162 144	223 14 42	30 55 129 109	187 10.0C 18.700 8827 10.0C 882.700 346? 30.0C 11.533 961? 30.0C 32.033
171 172 173 174 175	787 890 682 682 682 829	718 739 703 702 699 722	4:59:37 4:59:47 5: 0: 7 5: 0:12 5: 0:19 5: 0:28	-68: 2: 0 -65:54:56 -70:14: 3 -70:13: 0 -70:15: 6 -67: 9:56	NO LMC NO LMC NO LMC NO LMC						190 201 127 275 139	16 14 47 173	120 167 170 52 122 117	116? 30.0C 3.867 331 3.0L 110.333 347 3.0L 115.667 1854 10.0C 185.400 7718 30.0C 257.267 226? 30.0C 7.533
177 178	722	702	5: 0:42 5: 0:43	-69:24:46 -68:11:39	249166	-0: 4	0:31	AO	8.95	.00	196 169	20	131	1405 30.0C 46.833 619? 30.0C 20.633
179 180 181 182	721 721 672 776	705 705 694 710	5: 0:46 5: 0:46 5: 0:58 5: 1: 3	-69:25:20 -69:25:20 -70:28:13 -68:16:55	249166 249172?	-0: 0 -1: 9	-C: 2 8:37	A0 A3	8.95 8.32	.00	83 83 148 185	7 7 8	55 55 127 125	169 L 10.0C 16.900 169 10.0C 16.900 128? 30.0C 4.267 1717? 30.0C 57.233
193 184 185	776 678 591	712 693 693	5: 1: 7 5: 1:25 5: 1:51	-68:16:14 -70:20:55 -70: 4:45	NO LMC						177 155 150	10	54 11', 114	213 10.0C 21.300 764? 30.0C 25.467 147? 30.0C 4.900
196 197 199 199	880 664 645	724 726 691 686	5: 1:52 5: 1:56 5: 2: 2 5: 2: 3	-66: 9:45 -66: 9: 5 -70:38:18 -71: 3: 9	NO LMC						201 85 83 137	195 20 18 13	117 54 49	6987 30.0C 232.900 508 10.0C 50.800 477? 10.0C 47.700 380? 30.0C 12.667
190 191 192	651 661 852	685 688 714	5: 2:31 5: 2:42 5: 2:47	-70:55:50 -70:42:31 -66:44: 8	NO LHC						110	76 20	91 46 112	324? 30.0C 10.800 2585 10.0C 258.500 431? 30.0C 14.367
193 194 195	767 838 488 663	700 711 669 684	5: 2:48 5: 2:49 5: 3: 6 5: 3:10	-68:29:29 -67: 1:39 -74:23:42 -70:41: 2	256152 NO LMC	0:39	0:57	A0	6.97	.00	169 149 213 269	23 19 47 302	126 113 31	667? 30.0C 22.233 541? 30.0C 18.033 3263 H 10.0C 326.300 14651 30.0C 488.367
197 198 199 200	488 489 488 662	669 670 665 686	5: 3:13 5: 3:15 5: 3:16 5: 3:25	-74:23:10 -74:23:26 -74:24:34 -70:42:43	256152 256152 256152 NO LMC	0:46 0:48 0:49	1:29	A0 A0 A0	6.97 6.97 6.97	.00	122 257 362 201	14 19 77 28	167 80 168	489 1.0L 489.000 866 3.0L 288.667 7186 30.0C 239.533 715 3.0L 238.333
201 202 203	878 865 865	714 711 713	5: 3:39 5: 3:44 5: 3:47	-66:13:34 -66:29:49 -66:29: 8	NO LMC						156 250 109	16 111 27	120	-507 30.00 15.000 55257 30.00 19-1167 1027 10.00 102.700
204 205 206 207	678 678 624 677	707 686 704 685	5: 3:49 5: 3:54 5: 3:56 5: 3:57	-67:20:15 -70:22:46 -67:19:57 -70:23: 2	NO LMC LMC NO LMC NO LMC						199 220 298 152	20 14 89 168	165 177 117 45	5656 30.00 82967
808 809 815	737 824	706 692	5: 3:59 5: 3:60 5: 4: 4	-69: 8: 3 -67:19:16 -69: 7:21	NO LMC NO LMC NO LMC						257 130 115	124 58 91	121	7883 30.00 852.757 2570 :0.00 857.000
212	677 798 798 768	682 697 699	5: 4: 6 5: 4:19 5: 4:23 5: 4:24	-70:23:54 -67:52:48 -67:52: 6 -68:29:18	NO LMC NO LMC NO LMC						340 208 91 166	179 36 14 18	106 134 55 128	3499 30.00 554.300 1494 30.00 49.800 398 10.00 39.800 5562 30.00 17.967 71527 30.00 238.400 1002 30.00 33.333 453924 10.00 453.900
215 216 217	903 785	677 710 694	5: 4:50 5: 5: 4 5: 5:10	-70:45:50 -65:44:42 -68: 7:40	LMC 249185	-0: 4	1:28	89	7.83	00	258 132 191	80 5 82	105 111 57	7:52? 30.00 238.400 100? 30.00 3.333 4539?H 10.00 453.900
219 220 219	786 651 686 660	694 676 679 676	5: 5:16 5: 5:25 5: 5:27 5: 5:35	-68: 7:32 -70:56:48 -70:12:33 -70:44:59	249185 LMC LMC	0: 1	1:37	89	7.93	.00	212 88 94 106	28 11 16 13	174	793 3.0L 264.333 3507 10.0C 35.000 6047 10.0C 50.400 3237 1.0L 323.000
553 553	635 662 661	671 677 676	5: 5:36 5: 5:41 5: 5:43	-71:17:56 -70:44: 1 -70:44:19	NO LMC						123 240 209	81 176	176 50	697? 30.00 23.233 2755 3.01 9:8.333 10592 10.00 1059.200
225 226 227	663 638 571	674 669 662	5: 5:56 5: 6:12 5: 6:16	-70:41:22 -71:14:28 -72:39:26	LHC						107 111 119	15 7 6	97 84 77	383? 1.0L 383.000 174? 30.0C 5.800 197? 30.0C 6.567
230 230 230	9+9 9+8 669 566	710 712 673 661	5: 6:19 5: 6:20 5: 6:21 5: 6:22	-64:49:48 -64:50:19 -70:34: 1 -72:47: 5	NO LMS						355 196 106 130	29	101 43 81 78	3608? 30.00 120.267 1271 10.00 127.100 95 1.00 95.000 230? 30.00 7.667
232 233 234	670 671 670	670 673 672	5: 6:38 5: 6:41 5: 6:44	-70:34:13 -70:33:11 -70:33:30	NO LMC NO LMC NO LMC						251 230	470 79	174	51702 30.0C 1723.4C0 3628 3.0L 1209.333 10819 10.0C 1081.900
235 236 237	769 535 553 233	684 657 660	5: 6:45 5: 6:47 5: 7:32 5: 7:37	-68:29:59 -73:26:38 -73: 4:15 -79:49:13	256160	0:23	1.55	AO	6.25	.00	130 95 217 124	13	75 70 166 75	9×9? 10.0C 9×.900 93? 30.0C 3.100 457 3.0L 152.333 63×? 30.0C 21.133
239 240 241	551 552 552	624 658 658 655	5: 7:37 5: 7:44 5: 7:45 5: 7:54	-73: 5:22 -73: 4:44 -73: 5:36	256160 256160 256160	0:35 0:36 0:45	0:48 1:26 0:34	A0 A0	6.25	.00	100	19 5 32 54	72 31 76	118 1.0L 118.000 1844 L 10.0C 184.400 4601 30.0C 153.367
243	640 607 606	664 658 660	5: 8: 8 5: 8:12 5: 8:17	-71:13: 6 -71:54:45 -71:55:16	NO LMC NO LMC NO LMC						291 297	12 37 22	169 71 31	2997 30.0C 99.900 1591 10.0C 159.100
245 246 247 248	607 639 639	661 662 659	5: 8:18 5: 8:19 5: 8:25 5: 8:29	-71:54:56 -71:14:18 -71:13:34 -71:56: 1	NO LMC NO LMC NO LMC NO LMC						283 285 125 135	16	163 95 39 71	902 3.0L 300.667 5774 30.0C 192.467 1764 10.0C 176.400 479 1.0L 479.000
249	605 733 694	671	5: 8:38 5: 8:46	-69:15: 3 -70: 5: 3							157	51	108	707? 10.0C 70.700 1560? 30.0C 52.000

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			MENS	A RA 05:50 (DEC -74:00									
OBJECT NO.	x	Y	R.A.	DEC.	SAO NO.	A.A.	DEC.	SPEC	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.8 DEN.VOL/ VOLUME FILTER EXP.
25-25-45-56-7-12-3-7-7-56-7-88-8-8-8-9-56-7-8-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9	7:55 66 67 7:57 7:59 62 62 62 62 62 62 62 62 62 62 62 62 62	6564 2 656 658 659 659 659 659 659 659 659 659 659 659	551 2102 551 2102 561	- 68 - 48 - 59 - 69 - 69 - 69 - 69 - 69 - 69 - 69	22222 2 2 2222222 2 2 2222222 2 22 2 2222	0:24 0:23	1:43 2:27	88 88 88	7.40 7.40 7.40	.00	206 6113 224 232 111 246 248 248 248 248 248 248 248 248 248 248	853++++750+407775+4218885938642877257894314899772115536460935597898657756497775436578347461181884675	982477935827884344110011001150066117444110117970666664401184848841117970611111111111111111111111111111111	37167 10.0C

	MENSA RA 05:50	DEC -74:00											
OBJECT X Y	R.A. DEC.	SAO NO.	A. A.	Δ D€C.	SPEC. TYPE	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY VOLUME	EXP. &	DEN. VOL /
NO. 351 877 608 352 721 601 353 721 600 353 721 600 353 721 600 355 761 598 356 751 599 356 751 597 359 679 593 360 774 598 361 885 603 363 709 594 364 748 595 366 843 597 367 868 693 368 766 594 369 868 600 370 824 596 371 839 597 372 859 598 373 727 590 371 839 597 372 859 595 373 727 590 374 341 588 375 728 590 377 759 589 378 760 590 379 880 593 380 759 589 381 628 587 388 854 598 389 855 598 389 856 598 389 857 759 589 378 760 590 379 889 895 593 389 895 593 389 895 593 389 895 593 389 895 593 389 895 593 389 895 593 389 895 593 389 895 593 399 896 897 397 596 599 379 897 597 589 379 898 597 379 898 597 379 898 593 379 598 599 379 898 597 379 598 599 379 898 597 379 598 599 379 598 599 379 598 599 389 597 598 599 389 597 598 589 399 751 589	5:24:4 -66:26:44 5:24:15 -69:38:56 5:24:31 -69:38:18 5:24:35 -69:38:18 5:24:35 -68:49:0 5:24:47 -69:38:36 5:24:53 -68:32:33 5:25:16 -68:32:33 5:25:16 -68:32:27 5:25:38 -66:16:18 5:25:42 -69:53:36 5:25:42 -69:53:36 5:25:42 -69:53:36 5:25:43 -66:49:31 5:26:68 -66:38:18 5:26:69 -66:37:29 5:26:18 -67:31:00 5:26:28 -66:49:31 5:26:28 -66:49:31 5:26:28 -69:30:32 5:26:28 -69:30:32 5:26:28 -69:30:32 5:26:28 -69:30:32 5:26:28 -69:30:32 5:26:28 -69:30:32 5:26:28 -69:30:32 5:27:7 -68:50:27 5:27:7 -68:50:27 5:27:7 -68:50:27 5:27:7 -66:50:57 5:27:7 -66:50:57 5:27:7 -71:36:36 5:27:7 -67:27:33 5:27:47 -67:27:33 5:27:47 -67:27:33 5:27:47 -67:27:33 5:27:47 -67:27:33 5:27:58 -66:55:59 5:27:58 -66:55:59 5:27:58 -66:56:50 5:27:58 -66:56:50 5:27:58 -66:56:50 5:27:58 -66:56:50 5:27:58 -66:56:50 5:27:58 -66:56:50 5:27:58 -66:50:50	SAO NO. NO LHC NO LH	A.A.		SPEC.	V MAG		0EN. 162 216 135 134 139 150 197 223 115 106 241 110 110 110 110 110 110 110 110 110 1	58 11 320 9 9 24 17 17 30 8 80 82 82 82 82 82 82 82 82 8	129 187 109 108 108 108 108 108 108 108 108 108 108	VOLUME 1386? 280 11859 11859 277? 744? 445 1550 1594? 662? 3594 857? 1657 249? 546? 249? 546? 1567 681 26552? 249? 1578 1677 596? 3737; 672 445 1089 1157 1089 1157 1089 1157 1089 1157 10890 1157 10890 1157 10890	30 .0C 30 .0C 30 .0C 10 .0C 30 .0C 10 .0C 30 .0C 30 .0C 30 .0C 30 .0C 10	6.200 93.333 185.900 16.933 3.233 24.800 149.333 51.667 66.200 18.500 85.500 85.500 87.700 16.200 18.200 18.200 19.867 15.660 68.100 26.55.200 26.500 127.800 26.500 27.900 28.667 479.000 97.800 97.800 97.800 97.800 97.777.333 805.000 97.49.000
391 854 590 392 752 586	5:27:58 -66:55: 8 5:28: 1 -69: 0:33							277	46	194	749 2247?	3 . OL	74.900
399 864 587 400 729 581 401 867 585 402 688 575 403 764 579 404 763 578 405 749 578 406 801 576	5:28:39 -66:42:47 5:28:43 -69:28:53 5:29:5 -66:39:6 5:29:27 -68:49:53 5:29:27 -68:46:20 5:29:38 -69: 4:26 5:29:39 -68: 0:55							99 126 268 249 247 147	8 6 18 5 33 126 62 13	55 59 59 95 208 57 194 102	2117 1537 457? 125? 1045? 9615? 2200? 434?	10.0C 0.0C 10.0C 30.0C 3.0L 10.0C 3.0L 30.0C	21.100 15.300 45.700 4.167 348.333 961.500 733.333 14.467
407 836 581 408 693 573 409 749 576 410 714 573 411 664 573	5:29:40 -67:17: 0 5:29:57 -70:15: 2 5:29:59 -69: 3:54 5:30: 2 -69:48:39 5:30: 6 -70:51:31	NO LMC						220 136 192 164 258	19 12 172 50 94	190 100 59 115 80	308? 5304? 1560? 572£	3.0L 30.0C 10.0C 30.0C 30.0C	157.333 10.267 930.400 52.000 190.933
412 899 580 413 655 575 414 894 578 415 664 575 416 855 578	5:30: 9 -65:59:44 5:30: 9 -71: 2: 1 5:30:10 -66: 7:46 5:30:11 -70:50:41 5:30:19 -66:54: 6	NO LMC						111 62 134 115 208	6 8 30 171	79 37 120 47 62	104 135? 100? 906 11964?	1.0L 10.0C 30.0C 10.0C	13.500 3.333 90.600 1196.400
417 855 578 418 836 573 419 835 574 420 835 575	5:30:21 -66:54:39 5:30:39 -67:18:35 5:30:40 -67:17:58 5:30:41 -67:19:0	NO LMC NO LMC NO LMC						240 419 116 251	90 1071 11 519	190 113 89 48	2641? 133853 261 35968	3. OL 30. OC 1. OL 10. OC	880.333 4461.767 261.000 3596.800
421 836 575 422 616 570 423 637 569 424 662 571 425 764 571	5:30:44 -67:18:18 5:30:59 -71:52:3 5:31:3 -71:52:35 5:31:12 -70:53:15 5:31:18 -68:45:43	NO LMC						268 92 115 68 270	75 5 14 13	199 69 80 38 205	2727 108? 368? 319? 702	3.0L 30.0C 30.0C 10.0C	909.000 3.600 12.267 31.900 234.000
426 764 568 427 671 567 428 764 570 429 763 569	5:31:22 -68:47:17 5:31:24 -70:42:47 5:31:26 -68:45:12 5:31:28 -68:45:24	NO LMC NO LMC NO LMC						131 228 122	102	96 51 89	13703 114? 12297 214	30.0C 30.0C 10.0C 1.0L	456.767 3.800 1229.700 214.000
430 653 566 431 850 572 432 614 566 433 653 569 434 653 568	5:31:36 -71: 5:27 5:31:37 -67: 0:54 5:31:47 -71:54:36 5:31:55 -71: 5: 7 5:31:57 -71: 4:37	NO LMC						356* 254 92 236 183	109 ~	90 219 70 174 39	15762 736 260? 1461 5244	30.0C 3.0L 30.0C 3.0L 10.0C	525.400 245.333 8.667 487.000 524.400
435 652 567 436 773 567 437 818 565 438 817 567	5:32: 7 -71: 4:49 5:32: 8 -68:35:12 5:32: 8 -67:39:50 5:32:15 -67:40:45	NO LMC						107 120 429 302	63 346 156	78 53 117 186	262 2232? 47429 7034	1 . OL 10 . OC 30 . OC 3 . OL	262.000 223.200 1580.967 2344.667
439 878 570 440 709 566 441 709 565 442 815 565 443 816 566	5:32:16 -66:27:22 5:32:17 -69:54:11 5:32:23 -69:53: 7 5:32:24 -67:41:40 5:32:24 -67:41:29	NO LMC NO LMC NO LMC NO LMC						234 196 125 132 321	23 39 13 69 341	193 48 79 81 51	703? *2229 385 2057 28093	3. OL 10. OC 1. OL 1. OL 10. OC	234.333 222.900 385.000 2057.000 2809.300
444 670 563 445 710 566 446 740 566 447 709 563	5:32:25 -70:44: 4 5:32:27 -69:53:26 5:32:27 -69:15:47 5:32:28 -69:55: 2	NO LHC						272 234 333	14 27 64 147	178 195 112	3537 1275 17317 7161	30.0C 3.0L 3.0L 30.0C	11.767 425.000 577.000 238.700
948 740 565 949 877 567 950 682 562	5:32:34 -69:15:17 5:32:40 -66:28:6 5:32:41 -70:28:58							175	284	50 50	12307	10.0C 10.0C 30.0C	1370.300 123.000 4.067

MENSA	RA	05:50	DEC	-74:00

OBJECT NO.	x	Y	R.A.	DEC.	SAO NO.	R.A.	Δ D€C.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BC	DENSITY EXP.6 DEN. VOL/ VOLUME FILTER EXP.
451	270 823	569 563	5:32:49 5:32:50	-79: 8: 9 -67:31:41	NO LMC						144	12	80	438 30.0C 14.600 92 1.0L 92.000
453 454 455	760 269	561 563 571	5:32:55 5:33: 3 5:33: 3	-70:47:51 -68:51:29 -79: 8:33	NO						88	29	51	1907 30.0C 6.333 8117 10.0C 81.100
456 457	849 824	564 562	5:33: 5 5:33:17	-67: 1:38 -67:31:31	NU						180	23	31 74 47	111 10.0C 11.100 13377 10.0C 133.700 140417 10.0C 1404.100
458	825 622	562 560	5:33:21 5:33:25	-67:30:45 -71:44:32							106	72	184	2494? 3.0L 831.333 186? 30.0C 6.200
460	876 887	563 563	5:33:31 5:33:43	-66 29:20 -66 15:41							83	10	48	278? 10.0C 27.800 220? 10.0C 22.000
462 463 464	263 764 857	566 559 561	5:33:43 5:33:44 5:33:45	-79:16:55 -68:46:28 -66:52:10	NO						90 224	20 5 6	75 67 195	942 30.00 31.400 106? 10.00 10.600 155? 3.0L 51.667
465 466	901	562 560	5:33:46 5:33:53	-71:46:41 -65:59:11	NO LMC						204	4	169	110 3.0L 36.667 60? 30.0C 2.000
467 468	825 262	559 568 558	5:33:57 5:33:57	-67:31:31 -79:17:19	NO . MC						69	174	34	8126? 10.0C 812.600 244 10.0C 24.400
469 470 471	849 268 657	565 555	5:34: 6 5:34: 9 5:34:27	-67: 0:31 -79:10:40 -71: 0:26	LMC						126	17	86 74 86	380? 1.0L 380.000 429? 30.0C 14.300 84? 30.0C 2.800
472	455 456	566 561	5:34:41 5:34:41	-75:16:12 -75:15:19	256203 256203	0: 3 0: 3	-0: 6 0:47	AO AO	8.33	.00	192	6 36	160	161 3.0L 53.667 2571 30.0C 85.700
474 475 476	730 455 771	555 564 551	5:34:42 5:34:50 5:35: 4	-69:27:48 -75:15:44	256203	0:11	0:55	AO	8.33	.00	115	55	52 28	1895? 10.0C 189.500 936 10.0C 93.600
477 478	854 899	554 552	5:35:15 5:35:19	-68:38:31 -66:55:48 -66: 1:37	NO LMC						271 298	266	191	120? 30.0C 4.000 11311 3.0L 3770.333 3732 30.0C 124.400
479 480	717 853	553 552	5:35:21 5:35:23	-69:44:33 -66:55:27	NO LMC						150	65 36	184	2904? 3.0L 968.000 942 1.0L 942.000
482	752 855	552 551	5:35:23 5:35:23	-69: 1:27 -66:54:57	NO LMC						423	1312	111	911? 10.0C 91.100 149860 30.0C 4995.333
483 484 485	780 822	553 549 552	5:35:26 5:35:30 5:35:32	-66:55:21 -68:27:14 -67:35:37	NO LMC						248 148 216	17	61 113 195	29169 10.0C 2916.900 404? 30.0C 13.467 79 3.0L 26.333
486 487	899 758	553 551	5:35:34 5:35:36	-66: 0:45 -68:53:55	NO LMC						131	32	60	1372 10.0C 137.200 447? 10.0C 44.700
488	718	549 549	5:35:39 5:36:0	-67:36: 2 -69:41:40	NO LMC						305 115	127	151	9045? 30.0C 301.500 743 1.0L 743.000
490 491 492	756 851	548 548	5:36:21 5:36:25 5:36:32	-67:28:54 -68:56:48 -66:59:25							216	30 9 5	55 196 194	1070? 10.0C 107.000 215? 3.0L 71.667 104? 3.0L 34.667
493	871 872	545 544	5:36:48 5:36:50	-66:34:11 -66:34:58	249322 249322	-0: 6 -0: 5	1: 8	AO AO	6.44	.00	129	307	88	619 1.0L 619.000 27321 H 30.0C 910.700
495	872 872	546 546	5:36:52 5:36:53	-66:34:7 -66:34:31	249322 249322	-0: 3 -0: 1	1:12	AO AO	6.44	.00	348 291	147	55? 194	10982 H 10.0C 1098.200 2624 3.0L 874.667
497 498 499	730 731 729	545 542 544	5: 37:14 5: 37:16 5: 37:20	-69:29:19 -69:28:31 -69:30: 9	NO LMC NO LMC						304 442 310	214 2155 698	199	7583 3.0L 2527.667 237987 30.0C 7932.900 53991 10.0C 5399.100
500	728	543	5:37:25	-69:30:13 66:57:16	NO LMC						140	38	132	1366 1.0L 1366.000
502	827 697	540 541	5:37:37 5:37:39	-67:29:38 -70: 9:56							137	10	122	67? 30.00 2.233 178? 30.00 5.933
504 505 506	847 284 885	539 559 540	5: 37:45 5: 37:50 5: 37:50	-67: 4:43 -78:49:39 -66:18:44	256214	-0:50	1:16	89	6.14	.00	143 362 159	96 5	116 35 129	1607 30.00 5.333 8415 10.00 841.500 1297 30.00 4.300
507 508	732	541 538	5:37:52 5:37:53	-69:25: 9 -67:44:34	NO LMC						117	22	86	546 1.0L 546.000 1393? 30.00 46.433
509 510	694	531 539	5:37:55 5:38: 9	-78:50: 5 -70:13:39	256214	-0:45	0:50	89	6.14	.00	351 124	45	158	2804 3.0L 934.567 1407 30.0C +.667
511 512 513	282 284 746	559 555 539	5: 38:20 5: 38:28 5: 38:35	-78:50:59 -78:50:29 -69: 9: 5	256214 256214	-0:20 -0:11	0:27	69 89	6.14	.00	186	174	70 79	1437 1.0L 1437.000 17532 30.0C 584.400 90? 3.0L 30.000
514	748	535 532	5:39: 9 5:39:10	-69: 6: 7 -68:29:24	NO LITC						332	194	46	15519 10.00 1551.900 97? 30.00 3.233
516 517	672	534	5:39:12 5:39:16	-69: 6: 9 -70:41:12	NO LMC						143	50	78	720 1.0L 720.000 6097 30.0C 20.300
510 519 520	748 728 729	536 533 534	5: 39: 17 5: 39: 34 5: 39: 39	-69: 6:28 -69:29:56 -69:30:15	NO LMC NO LMC NO LMC						116	42 11 38	199 84 191	2132 3.0L 710.667 291 1.0L 291.000 1471 3.0L 490.333
521	729	530 531	5:39:39 5:39:40	-66: 8:34 -69:30:45	NO LMC						394	19	100	648? 30.00 21.600 64210 30.00 2140.333
523 524	729	533 531	5:39:44	-69:29:53 -67:22:15	NO LMC 249336?	-5: 0	3:15	AO	7.15	.00	232	24B 30	41	16299 10.0C 1629.900 935? 10.0C 93.500
525 526 527	749 733 721	529 530 530	5:40:33 5:40:34 5:40:40	-69: 4:39 -69:25: 5 -69:40: 8	NO LHC						87 240 228	12 31 52	195 196	2017 10.00 20.100 091 3.0L 297.000 14617 3.0L 407.000
528 529	382 530	546 536	5:41: 4	-76:48:17 -73:41:23							103	6	66 59	163? 30.0C 5.433 473? 30.0C 15.767
530 531	777 6 3 4	522 527	5:41:27 5:41:38	-68:30:17 -71:28:45							99	55	116	295? 30.0C 9.833 94? 30.0C 3.133
532 533 534	704 831 830	523 519 521	5:41:48 5:41:57 5:41:60	-70: 1:50 -67:23:59 -67:24:21	249336	0: 8 0:11	1:32	A0 A0	7.15	.00	131 350 177	620 76	112	169? 30.0C 5.633 37784 H 30.0C 1259.467 3517 H 10.0C 351.700
535 536	931	521 523	5:42: 3 5:42:13	-67:23:23 -69:40:46	249336 NO LMC	0:14	2: 7	AO	7.15	.00	136	11	193	263 L 3.0L 87.667 6870 10.0C 687.000
537 538	704 868	521 517	5:42:17	-70: 1:44 -66:39: 5							139	10	106	241? 30.0C 8.033 269? 30.0C 8.967
539 540 541	534 641 742	532 523 518	5:42:20 5:42:38 5:42:40	-73:36:10 -71:21:1 -69:13:55	NO LHC						175 315	9 38 237	102	2007 30.0C 6.667 1590 30.0C 53.000 17905 30.0C 596.833
542	640 742	525	5:42:42	-71:20: 8 -69:13: 2	NO LHC						72	10	31	309 10.0C 30.900 5109 10.0C 510.900
544	788 835	516	5:42:44	-68:16:16 -67:17:56	2493367	1: 1	7:35	AO	7.15	.00	93	35	50	412? 30.0C 13.733 1100? 10.0C 110.000
546 547 548	987 719 809	515 518 512	5:43:15 5:43:26 5:43:27	-66:15:38 -69:41:46 -67:51: 6	NO LHC						67 63	99 46	103	957 10.0C 913.100 957 10.0C 9.500 2789 30.0C 92.967
549 550	808 729	514	5:43:30 5:43:34	-67:51:28 -69:29:11	NO LHC						112	24	59	969 :0.0C 96.900 927 10.0C 9.200

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			MENS	A RA 05:50	DEC -74:00									
OBJECT NO.	×	Υ	R.A.	D€C.	SAO NO.	R.A.	DEC.	SPEC.	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. B DEN. FOLT FILTER EXP.
551 552 553 554 555 556 557 558 559	808 885 741 741 839 839 728 720 850	514 510 511 513 508 508 509 509	5 43 35 5 43 40 5 44 20 5 44 24 5 44 45 5 44 47 5 44 57 5 45 3 5 45 15	-67:51:43 -66:21:23 -69:14:49 -69:13:55 -67:13:42 -67:13:59 -69:30:59 -69:41:1	NO LMC LMC NO LMC NO LMC NO LMC NO LMC						210 201 197 83 148 231 130 126 170	6 118 224 8 110 28 5	189 104 102 51 53 195 97 97	118 3 0L 39.333 63617 30.0C 212.033 9184 30.0C 316.133 211 10.0C 21.100 785 3.0L 261.667 1397 30.0C 4.633 1007 30.0C 3.333 4377 30.0C 1.567
560 561 562 563 564 565 566	715 554 810 735 465 985	530 504 516 499 502 521 487	5:45:38 5:46:5 5:46:12 5:46:19 5:46:39 5:47:24 5:47:31	-76: 7:15 -69:47: 2 -73:10: 9 -67:49: 5 -69:19:27 -75: 2:27 -64:24: 1	249353 LMC NO LMC	0: 4	-5: 30	AO	8.13	.00	98 128 85 132 115 102 206	6 12 5 23 7 6	66 88 62 93 82 62 124	158? 30.00 5.267 376? 30.00 12.533 110? 30.00 3.667 616 L 30.00 20.533 190? 1 0L 190.000 187? 30.00 6.233 1899 30.00 63.300
567 568 569 570 571 572 573	984 558 465 463 801 561 789	511 524 522 491 509 489	5:47:33 5:47:35 5:47:42 5:47:59 5:47:59 5:48:6 5:48:36	-64:24:20 -73: 4:45 -75: 1:47 -75: 2:38 -67:59:48 -73: 0:50 -68:14:37	NO LMC						90 117 229 109 163 93 138	9 6 133 6	60 163 68 103 59	1259 10.0C 27.100 813? 30.0C 27.100 379 3.0L 126.333 182 1.0L 126.000 3434 30.0C 114.467 1652 30.0C 5.500 1309? 30.0C 43.663
574 575 576 577 578 579	709 394 700 700 805 700	493 521 493 493 483 490	5:48:50 5:49:14 5:49:32 5:49:42 5:49:43	-69:53:45 -76:31:47 -70: 3:58 -70: 4:5 -67:54:11 -70: 4:48	NO LMC NO LMC						97 142 229 113	66 62 26	85 65 38 185 90 85	485? 30.0C 16.167 155? 30.0C 5.167 2839 10.0C 283.90C 752 3.0L 250.667 88? 30.0C 2.933 7768 30.0C 258.933
580 581 582 583 584 585 586	854 856 855 855 939 792 791	480 479 481 481 474 479	5:50: 5 5:50: 5 5:50:21 5:50:23 5:50:36 5:50:48 5:50:52	-66:54:10 -66:54:5 -66:54:19 -66:54:26 -65:17:1 -68:10:2	249368 249368 249368 249368 249373 NO LMC	0: 9 0:24 0:26 0: 6	0:39 0:44 0:30 0:24 -0:41	85 85 85 85 80	5.15 5.15 5.15 5.15 7.96	.00 .00 .00	404 445 459 463 138 175	340 232 134 8 205	96 112 49 196 112 90	9713 1.0L 9713.000 94190 L 30.0C 1473.000 28095 L 10.0C 2809.500 14030 3.0L 4676.667 130 L 30.0C 4.333 7969 30.0C 265.633 782 10.0C 78.200
587 588 589 590 591 592	576 579 690 246 708 257	497 494 481 525 478 528	5:50:57 5:51:44 5:52:7 5:52:18 5:52:33 5:52:45	-72:41: 0 -72:36:57 -70:16:31 -79:36:16 -69:56:10 -79:23: 2	256248	-0:53	-0:42	88	5.56	.00	91 113 127 106 113	7 14 10 11 4	63 64 86 79 86 162	162? 30.0C 5.400 421? 30.0C 14.033 281? 30.0C 9.367 253? 30.0C 9.367 253? 30.0C 8.433 100? 30.0C 3.333
593 594 595 596 597	791 789 257 256 778	472 469 525 526 468	5:52:53 5:52:53 5:53: 4 5:53:11 5:53:19	-68: 9:30 -68:12:55 -79:22:40 -79:22:34 -68:26:32	NO LMC LMC 256248 256248	-0:35 -0:28	-0:20 -0:15	88 88	5.56 5.56	.00	72 176 415 251 108	97 121 35	38 96 37 72 85	1120 10.00 112.000 4332? 30.00 144.400 12514 10.00 1251.400 2365 1.0L 2365.000
598 599 600 601	727 589 258 785	471 485 521	5:53:19 5:53:35 5:53:44 5:53:44	-69:29:17 -72:23:34 -79:22: 8	256248	0: 5	0:11	88	5.56	.00	116 110 423	5 <u>66</u>	87 64 80	91? 30.0C 3.033 104? 30.0C 3.467 476? 30.0C 15.967 26661 30.0C 998.700 252? 30.0C 8.400
602 603 604 605 606	594 906 905 590	482 452 454 476 527	5:54:27 5:55: 7 5:55:10 5:56:12 5:56:29	-72:16:57 -65:53:14 -65:53:31 -72:21:18 -83: 3:42	NO LMC						109 223 95 114 135	32 51 26 11	64 93 38 64 65	992? 30.00 33.067 2910 30.00 97.000 938 10.00 93.800 355? 30.00 11.833 439? 30.00 14.633
607 608 609 610	788 788 605 741	453 455 471 450	5:56:30 5:56:32 5:56:54 5:58:16	-68:12:25 -68:11:28 -72: 1:58 -69:10:36	NO LMC						191 81 88 143	36 12 7 18	90 38 67 83	1624 30.00 54.133 378 10.00 37.800 136? 30.00 4.533 661? 30.00 22.033
611 612 613 614 615	612 773 773 621 631	465 441 443 457 448	5:58:20 5:59:20 5:59:36 5:59:57 6: 2: 1	-71:52:26 -68:29:42 -68:28:36 -71:40:13 -71:26:24	NO NO LMC						150 65 119	46 22 4 50 18	65 87 37 66 70	1515? 30.0C 50.500 773 30.0C 25.767 101 10.0C 10.100 1653? 30.0C 55.100 466? 30.0C 15.533
616 617 618 619 620	709 493 492 636 368	436 467 469 443 485	6: 2:13 6: 2:50 6: 2:58 6: 3:12 6: 3:21	-69:48:43 -74:22:40 -74:22:57 -71:20:38 -77: 1:20	NO NO NO						140 177 74 108 125	10 25 8 11	76 63 27 70 70	382 30.0C 12.733 1233 30.0C 41.100 253 10.0C 25.300 309? 30.0C 10.300 441 30.0C 14.700
621 623 624 625	367 461 460 460 893	486 463 465 466 396	6: 3:55 6: 5:44 6: 5:53 6: 6: 4 6: 6:44	-77: 1:27 -75: 1:56 -75: 2:12 -75: 2: 8 -65:59:48	NO NO NO 249448	0:39	2: 9	89	5.83	.00	163 73 202 133	14 7 22	29 62 27 167 93	105 10.0C 10.500 726 30.0C 24.200 223 10.0C 22.300 109 3.0L 36.333 654 1.0L 654.000
626 627 628 629 630	895 894 894 315 661	395 397 397 482 421	6: 6:47 6: 6:50 6: 6:50 6: 7:15 6: 7:29	-66: 0:12 -66: 0:10 -66: 0:26 -78: 6:55 -70:46: 7	249448 249448 249448 NO	14:0 0:44 0:44	1:45 1:47 1:31	89 89	5.83 5.83 5.83	.00	417 294 356 228 142	90 21 105	95 208 40 76 74	15829 30.00 527.633 1972 3.0L 657.333 8962 10.00 896.200 1321 30.00 44.033 4004? 30.00 133.467
631 632 633 634 635	314 933 932 314 313	483 383 385 484 482	6: 7:52 6: 8: 9 6: 8:11 6: 8:19 6: 8:40	-78: 6:59 -65:14: 7 -65:14:20 -78: 6:53 -78: 6:20	00 00 00 00						113 161 69 223 102	13 31 7 7	30 101 43 162 71	596 10.0C 59.600 1109 30.0C 36.967 161 10.0C 16.100 283 3.0L 94.333 106 1.0L 106.000
636 637 638 639 640	672 752 753 752 751	413 402 399 401 400	6: 9: 16 6: 9: 19 6: 9: 23 6: 9: 25	-70:30:59 -68:49:23 -68:49:16 -68:49:31 -68:48:50	249461 249461 249461 249461	0:12 0:15 0:19 0:21	0:35 0:42 0:28 1:8	89 89 89	5.21 5.21 5.21 5.21	.00	123 422 420 418 281	97 60 244 134	81 202 88 37 88	2520? 30.00 84.000 5205 3.0L 1735.000 25104 30.00 836.800 13189 10.00 1318.900 3178 H 1.0L 3178.000
641 642 643 644 645	925 918 690 360	499 366 367 396 465	6:10:27 6:11:44 6:11:45 6:12:19 6:12:26	-82: 0:27 -65:20:46 -65:29:30 -70: 5:32 -77: 6:10	258432	-0:17	-1:34	AO	6.89	.00	129 143 142 115	27 13 8 34	85 104 97 82 176	683 L 30.0C 22.767 3487 30.0C 11.600 2387 30.0C 7.933 8907 30.0C 29.667 125 L 3.0L 41.667
646 647	360 434	463	6:12:28	-77: 6: 8 -75: 12:26	256277	-0:17	-0:38	AO	6.89	.00	120	53	30 70	2417 30.0C 102.400 2417 30.0C 8.033
648 649 650	361 697	460 392 501	6:12:39 6:13:1 6:13:18	-77: 5:41 -69:56: 3 -82:10: 4	256277 258438	-0: 6 -1:13	-0:11	88	7.61	.00	257 113 171	91 8 14	90 137	2889 30.0C 96.300 174? 30.0C 5.800 398 L 3.0L 132.667

122

			MENS	A RA 05:50 I	DEC -74:00									
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	D€C.	SPEC . TYPE	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EXP.S DEN. VOLV
651 652 653	780 1:5	376 497 493	6:13:32 6:14: 7 6:14:56	-68:11:27 -82:10:50 -82:10:11	258438 258438	-0:24 0:25	-2:14 -1:35	88 88	7.61 7.61	.00	144	17 47 88	95 31 74	536? 30.00 :7.667 2205 10.00 220.500 6301 30.00 210.033
654 655 656	707	381 377 416	6:15:17 6:15:56 6:16: 0	-69:42:37 -69:33: 6 -73:37:23	256286	0: 5	-0:53	89	6.80	.00	109 118 369	9 106	91 70	86? 30.00 2.967 184? 30.00 6.133 8493 30.00 283 100
657 658 659	522 521 877	418 420 349	6:16:5 6:16:14 6:16:18	-73:36:22 -73:37:23 -66:13:48	256286 256286 249497	0:10 0:19 0:41	0: 8 -0:52 2:37	89 89	6.80 6.80 7.34	.00	307 389	49 24 97	30 179 97	3780 10.00 378.000 1389 3.0L +63.000 9911 + 30.00 330.367
662 661	876 876 520	351 351 418	6:16:21 6:16:22 6:16:27	-66:13:59 -66:13:31 -73:36:47	249497 249497 256286	0:44	2:26 2:54 -0:17	89 89	7.34 7.34 6.80	-00	230 267 146	67 22 14	216 78	+880 10.00 +88.000 731 3.0L 2+3.667 579 1.0L 579.000
663 664 665	726 719	395 370 370	6:16:38 6:16:50 6:17: 8	-71:45:22 -69:16:58 -69:25:36							102 117 118	9 5	74 97 87	93? 30.00 3.100 139? 30.00 + 633 142? 30.00 + 733
666 667 668	723	367 365 389	6:17:39 6:17:57 6:17:58	-69:19:59 -69:14:36 -71:37:48							137	51 6	91 90 75	190? 30.0C 6.333 653? 30.0C 21.767 181? 30.0C 6.033
669 670 671	528 614 590	397 391	6:18:53 6:19:3 6:19:14	-73:27:25 -71:35:33 -72: 6:29	NO 256290	0: 7	0: 6	AO	7.96	.00	96 223 74 139	24	72 188 30	89? 30.00 2.967 688 3.0L 229.333 281 L 10.00 28.100
672 673 674 675	982 591 978 901	333 388 331	6:19:24 6:19:27 6:19:57 6:20:41	-0: 5:22 -72: 7:17 -66: 9:46	256290	0:20	-0:42	AO	7.96	.00	181 123 124	12 23 7 8	100 76 98 96	326? 30.00 10.967 1105 L 30.00 36.933 163? 30.00 5.433 192? 30.00 6.067
676 677 678	635 748 644	339 372 346 367	6:20:50 6:21:11 6:21:39	-67:41:22 -71: 9:30 -68:45:46 -70:57:10	256298?	-2: 8	-2: 9	SA	8.06	.00	111	56 8 68	77 95 78	1566? 30.0C 52.200 182? 30.0C 6.067
679 680 681	643 724 637	369 346 361	6:21:57 6:22:18 6:23:32	-70:56:46 -69:15:13 -71: 4:16	256298?	-1:49	-1:45 -9:15	SA .	8.06	.00	214	41 92	190	2816 H 30.0C 93.867 95 L 3.0L 28.333 2348? 30.0C 78.267 3081 H 30.0C 102.700
682 683 684	854 853 771	315 317 327	6:23:49 6:24: 2 6:24:24	-66:35:32 -66:34:13 -68:14:5	NO NO	0.15	3		0.00		173	12 5	100	517 30.0C 17.233 156 10.0C 15.600 127? 30.0C 4.233
685 686 687	360 779 787	426 319 311	6:24:51 6:25:49 6:27:10	-76:59: 2 -68: 3:27 -67:51:33							103	10	75 98 98	246? 30.0C 8.200 267? 30.0C 8.900 190? 30.0C 6.333
688 689 690	365 589 533	355 371	6:27:47 6:28:41 6:28:44	-76:51:36 -71:59:45 -73:12:13	NO NO						109 62 73	62	78 32 32	1452? 30.00 48.400 102 10.00 10.200 234 10.00 23.400
691 692 693	798 590 534	301 352 368	6:28:48 6:28:50 6:28:54	-67:36:40 -71:59:18 -73:11:46	NO NO						130 147 165	13	98 84 78	327? 30.0C 10.900 520 30.0C 17.333 889 30.0C 29.633
694 695 696	902 746 257	310 439	6:29: 5 6:29:13 6:30:23	-67:32:28 -68:40:13 -79: 5: 2							152	6 5	107	129? 30.00 4.300 177? 30.00 5.900 112? 1.0L 112.000
697 698 699	343 343 733	419 417 308	6:30:31 6:30:56	-77:16:43 -77:16:53 -68:53: 1	256308 256308 NO	-0: 4 -0: 3	-1:25 -1:35	A0 A0	6.98 6.98	.00	118	22	176 32 221	129 L 3.0L +3.000 1019 10.0C 101.900 +19 3.0L 139.667
700 701 702	735 730 639	305 307 330	6:30:56 6:31:0 6:30:60	-68:52:10 -68:52:18 -70:54:43	NO NO		-0:49	OA.	6.98	00	197 136 271	57 36 8	40 90	2791 30.0C 159.700 2230 10.0C 223.000 2737 30.0C 9.100
703 704 705 706	344 820 236 668	413 283 435 301	6:31:47 6:31:47 6:32:53 6:35:46	-77:16: 7 -67: 7: 2 -79:31:50 -70:11: 7	256308	0:30	-0:49	AU.	0.98	.00	125	41 7 6 72	78 101 81 99	3095 30.0C 103.167 1597 30.0C 5.300 1787 30.0C 5.933 18627 30.0C 62.067
707 708 709	682 633 633	296 306 305	6:36:8 6:37:49 6:37:52	-69:53:45 -70:52:10 -70:52:47	NO NO						149 262 163	113 14 28	97 211 37	40417 30.00 134.700 471 3.0L 157.000 1609 10.00 160.900
710 711 712	634	302 374 242	6:38:1 6:38:40 6:38:46	-70:52:20 -75:53:35 -66:28:18	NO						304 126 136	53	97 79 108	3538 30.00 117.933 231? 30.00 7.700 102? 30.00 3.400
713 714 715	175 877 880	436 233 232	6:39: 2 6:39: 8 6:39:10	-80:45: 3 -65:50:30 -65:46:36							1 35 1 38 1 39	22 5 10	83 113 112	764? 30.00 25.467 118? 30.00 3.933 237? 30.00 7.900
716 717 718	318 884 309	397 228 398	6:39:15 6:39:46 6:39:51	-77:42:50 -65:41:44 -77:54: 3							109 149 119	5 29 71	112	114? 30.00 3.800 795? 30.00 26.500 1994? 30.00 66.467
719 720 721	669 898 321	275 214 389	6:41:41 6:41:44 6:41:56	-70: 2:47 -65:21:42 -77:36:24							133 162 123	23 14 24	98 127 100	624? 30.0C 20.800 364? 30.0C 12.133 304? 30.0C 10.133
722 723 724	283 688 687	268 268	6:42: 8 6:42:33 6:42:38	-78:24:58 -69:37:60 -69:38: 4	256327 249630 249630	-0:17 0: 4 0: 9	-1:31 1:22 1:17	A0 A0	9.80 7.56 7.56	.00	72 250 114	10 117 24	106	270 L 10.0C 27.000 5726 H 30.0C 190.867 950 10.0C 95.000
725 726 727	284 776 777	398 240 241	6:42:42 6:42:52 6:42:58	-78:24: 8 -67:44:11 -67:44:34	256327 249631 249631	0:17 0:19 0:25	-0:41 3:21 2:57	A0 A0	8.80 6.86 6.86	.00	175 132 290 275	24 5 20 10	107 238 239	1123 30.00 37.433 112 L 1.0L 112.000 678 3.0L 226.000 286 3.0L 95.333
728 729 730	756 779 757	247 238 244	6:42:59 6:42:59 6:43: 3	-68:10:33 -67:44: 1 -68:11:12	NO 249631 NO 249631	0:26	3:31	A0	6.86	.00	385 340 237	79 58	113	7273 30.00 242.433 4939 30.00 164.633
731 732 733 734	756 881 885	246 212 209	6:43: 7 6:43: 7 6:43:15 6:43:15	-67:45:16 -68:11:15 -65:38:35 -65:35:43	NO NO NO	0:34	2.13		0.00	.00	169 307 397	38 50 154	263	2138 10.0C 213.800 1482 3.0L 494.000 14942 30.0C 498.067
735 736 737	983 705 707	211 258 255	6:43:21 6:43:27 6:43:36	-65:36:56 -69:13:18 -69:12:52	NO NO NO						196 105 237	96 17 32	49 42 108	5393 10.0C 539.300 661 10.0C 66.100 1862 30.0C 62.067
738 739 740	843 845 844	218 215 217	6:44: 2 6:44: 7 6:44:11	-66:23:36 -66:23:6 -66:23:9	NO NO						322 139	8 84 50	252 118 49	202 3.0L 67.333 6188 30.0C 206.267 2217 10.0C 221.700
741 742 743	784 782 621	530 530 558	6:44:50 6:44:58 6:46:53	-67:35:44 -67:36:58 -70:57:54	NO						86 163	32 17 13	110	1589? 30.0C 52.967 514 10.0C 51.400 396? 30.0C 13.200
744 745 746	567 381 756	285 352 217	6:47:42 6:48:40 6:48:48	-72: 7:54 -76: 8:10 -68: 5:19							137 126 148	20 13	105 96 111	124? 30.0C 4.133 576? 1.0L 576.000 350? 30.0C 11.66?
747 748 749 750	759 492 695 757	213 305 228 204	6:49:26 6:50:1 6:50:22 6:51:20	-68: 0:15 -73:43:55 -69:18:43 -68: 0:44							169 118 148 167	11	95 113 112	22137 30.0C 73.767 857 30.0C 2.833 2897 30.0C 9.633 16387 30.0C 54.600

			MENS	A RA 05:50 (DEC -74:00									
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EXP. & DEN. VOL/ VOLUME FILTER EXP.
751 752 753 754 755 756 757 758 759 760 761	611 360 618 617 616 618 548 442 371 373 690 343	256 348 251 252 250 248 273 318 336 215	6:51:27 6:51:34 6:51:51 6:52:35 6:52:4 6:52:35 6:53:32 6:53:40 6:54:6 6:54:6	-71: 4: 6 -76: 35: 55 -70: 54: 11 -70: 54: 32 -70: 53: 44 -70: 54: 56 -72: 27: 4 -74: 45: 33 -76: 18: 43 -76: 15: 30 -69: 17: 25 -76: 54: 51	256344 256344 256344 256344	-0:11 -0:9 -0:0 0:2	-0:6 -0:26 0:21 -0:50	88 88 88 88	5.52 5.52 5.52 5.52	.00	83 118 434 441 349 434 149 129 126 138 292	28 15 162 73 50 319 9 14 12 27	90 95 235 104 117 111 97 98 93 245	81+7 10.00 81.400 3+17 30.00 11.367 16676 10.00 1667.600 6+51 3.0 2150.333 +290 1.0. +290.000 29696 30.00 99.667 2537 30.00 6+33 2967 30.00 9.667 3657 30.00 9.667 3657 30.00 12.167 8867 3.0.0 295.000 +517 30.00 12.167
763 764 765 766 767 768 769 770 771 772 773	382 539 373 350 352 356 635 637 339 356 636 354	331 269 334 342 341 338 229 225 343 339 227 339	6:54:42 6:54:43 6:54:49 6:54:55 6:55:40 6:55:40 6:55:50 6:55:50 6:55:50	-76: 2:43 -72: 35:42 -76:14:40 -76:45:17 -76:42:30 -76:25:20 -70:25:20 -70:24:37 -76:58:43 -76:34:55 -70:24:38	NO 256351 256351 NO 256351 NO	0: 5 0: 3	0: 1 0:44 0:43	5A 5A	7.22	.00	131 136 128 130 133 290 273 331 120 133 177	16 4 4 9 7 1 4 6 7 4 4 8 23 29 4	96 112 93 96 96 92 244 117 90 35 46 82	4287 30.0C 14.267 877 30.0C 2.900 1207 30.0C 4.000 2207 30.0C 7.333 2227 30.0C 7.400 7818 30.0C 260.600 174 3.0C 260.600 1555 4 30.0C 16.833 2007 30.0C 6.667 1159 10.0C 170.700 1707 H 10.0C 170.700 100 1.0L 100.000
775 176 777 778 779 780 781 782 783 784 785	355 393 361 392 359 358 578 523 580 687 522 579	340 320 334 322 329 331 241 261 237 194 263 239	6:56:16 6:56:46 6:56:56 6:56:57 6:58:8 6:58:21 6:58:22 6:58:25 6:58:29 6:58:30	-76: 35: 12 -75: 46: 37 -76: 26: 51 -75: 46: 39 -76: 29: 3 -76: 29: 5 -71: 36: 47 -72: 51: 14 -71: 36: 6 -69: 17: 6 -72: 51: 15	NO N						232 192 64 84 175 73 260 334 237 215 233	180 4 127 5 6 34 25 12 23	185 91 39 36 89 36 234 105 121 115 42	285 3.0. 95.000 82227 30.00 274.067 926 10.00 274.067 378 10.00 37.800 1193 30.00 39.767 138 10.00 13.800 138 3.0. 46.000 2899 30.00 96.633 13337 30.00 44.433 605 30.00 20.167 1856 10.00 185.600
787 788 789 790 791 792 793 794 795 796 797	686 520 521 498 499 497 227 227 226 788 363	196 262 263 271 268 272 379 376 377 150 322	6:58:34 6:58:48 6:58:59 6:59:12 6:59:12 6:59:18 6:59:35 6:59:39 7: 0: 5	-69:17: 5 -72:50: 39 -72:51: 2 -73:22: 37 -73:22: 50 -79:20:22 -79:20:25 -79:19: 30 -67: 9: 5 -76:22:24	NO NO NO NO NO 256355 256355 256355	-0:28 -0:11 -0:7	0:39 0:36 1:31	A0 A0 A0	5.51 5.51 5.51	-00	93 168 313 110 239 248 288 318 131 149 122	7 13 12 15 28 8 39 61 18	45 97 219 40 :07 216 170 35 73 121	246 10.0C 24.600 546 10.0 546.000 711 3.0L 237.000 620 10.0C 62.000 1682 30.0C 56.067 2031 3.0L 67.000 5553 10.0C 555.300 5553 10.0C 3.167 1427 30.0C 3.167 1427 30.0C 4.733
798 799 800 801 802 803 804 805 806 807 808	228 631 293 362 364 353 352 355 354 626 625	372 206 343 317 314 323 321 314 316 195	7: 0:10 7: 0:36 7: 2: 2 7: 2:15 7: 2:16 7: 2:36 7: 3:36 7: 3:36 7: 3:42 7: 3:42	-79:19:29 -70:25: 8 -77:25: 45 -76:19:41 -76:18: 3 -76:31: 4 -76:30:11 -76:28:34 -76:28:34 -70:27:14 -70:27:13	256355 NO NO NO NO 256366 256366	0:24 0:4 0:10	0:41	A0 A0	7.66 7.66	.00	398 141 117 80 172 234 111 316 161 241	109 4 17 8 10 5 62 26	87 119 93 47 91 191 81 91 35 128	11072 L 30.0C 369.067 827 30.0C 2.733 889 30.0C 2.933 399 10.0C 39.900 381 30.0C 12.700 2917 3.0L 97.000 126 1.0L 126.000 13708 30.0C 456.933 3179 10.0C 317.900 1406 30.0C 46.867 483 L 10.0C 46.867
810 811 812 813 814 815 816 817	354 353 360 502 719 774 742 743 743	317 315 309 243 148 123 127 128 128	7: 3:53 7: 4: 8 7: 4:26 7: 5:27 7: 6: 8 7: 6:30 7: 8: 7 7: 8:13 7: 8:14	-76:27:33 -76:26:40 -76:20:23 -73: 8:53 -68:22:34 -67:16: 5 -67:49: 9 -67:51: 9 -67:49:33	249747 249747 249747 249747	0:17 0:21 0:23	2:11 0:12 1:47 1:45	88 88 88	7.88 7.88 7.88 7.88	.00	255 122 169 158 307 152 155 223 337 403	9 6 56 7 21 6 18 74 73	192 83 98 114 267 121 125 52 281 120	368 3.01 122 667 179 100 179 1.01 179 1.01 179 100 12699 30.00 176 300 195 30.00 6 500 590 30.00 196 667 30.00 196 667 1637 30.00 47 7.000 447 1.01 447 .000 2387 H 3.01 795 667 11559 H 30.00 795 667 11559 H 30.00 1795 667
819 820 821 822 823 824 825 826 827 828	519 518 518 301 680 321 281 700 334 334	223 225 226 318 147 308 323 130 298 300	7: 8:26 7: 8:27 7: 8:28 7: 9:33 7: 9:44 7:10:12 7:11:13 7:11:27 7:11:40 7:11:43	-72:41:42 -72:40:32 -72:39:25 -77:31:58 -69: 5:47 -77: 5: 6 -77:56:58 -68:37:24 -76:45: 6 -76:43:56	NO NO NO NO	0:24	1:43	86	7.88	. 00	264 130 269 132 290 122 132 305 241 112	26 17 7 32 4 25 11 10 25	232 107 269 87 86 277 97	1714 30.0C 57.133 783 10.0C 78 300 191 3.0L 63.667 4207 30.0C 14.000 817 3.0L 27.000 7307 30.0C 12.033 3617 30.0C 12.033 3617 30.0C 12.033 2497 3.0L 83.000 2223 30.0C 74.100 384 10.0C 38 400
829 830 831 832 833 834 835 836 837 838 839	324 317 334 294 750 714 735 218 714 306 335	302 305 301 314 100 116 106 344 112 305 291	7:11:49 7:11:49 7:11:59 7:12:52 7:12:52 7:12:59 7:13:14 7:13:16 7:13:25 7:13:30 7:13:31	-76:58:37 -77: 8:11 -76:42:46 -77:37:60 -67:35:53 -68:19: 2 -67:49:41 -79:19: 4 -68:19:16 -77:20:47 -76:40:54	NO NO 256381	0:39	1:45	A0	7.86	.00	183 139 226 144 233 80 320 127 169 138 175	89 28 5 8 43 5 43 29 18	89 90 197 104 129 53 306 86 127 90	\(^4\frac{979}{30.00}\) 20.00 \(^1\frac{152.633}{6.200}\) 1.066 \(^2\frac{3}{30.00}\) 30.00 \(^1\frac{2}{30.00}\) 7.300 \(^2\frac{24247}{30.00}\) 30.00 \(^1\frac{2}{30.00}\) 125 \(^1\frac{1}{30.00}\) 10.00 \(^1\frac{2}{30.00}\) 13.033 \(^1\frac{1}{30.30}\) 13.033 \(^1\frac{1}{
841 841 843 845 845 847 848 849	727 315 319 294 744 318 317 321 314 288	106 299 297 310 96 298 300 294 301 299	7:13:58 7:14:11 7:14:15 7:14:24 7:14:35 7:14:53 7:14:57 7:15:1	-67:58:45 -77: 7:23 -77: 1:47 -77:34:52 -67:36:47 -77: 1:13 -77: 1:41 -76:57:56 -77: 5:38 -77: 6:18 -77: 6:18	NO NO NO						324 235 255 67 340 104 215 207 240 108 209	106 74 6 7 24 54 14 29	296 94 90 34 316 46 188 90 189 45 183	2167 3.0.0 72.000 70457 30.0C 234.833 52067 30.0C 173.533 1607 10.0C 16.000 1007 3.0. 33.333 746 10.0C 74.600 99 3.0. 33.000 3650 30.0C 121.667 480 3.0. 160.000 11887 10.0C 118.800 11887 3.0. 3.03 333

			MENS	A RA 05:50	DEC -74:00											
NO.	×	*	R.A.	D€C.	5A0 NO.	A. A.	DEC.	SPEC . TYPE	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY VOLUME	EXP. &	DEN. VOL / EXP.
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892 893 894 895	354 353 587 296 298 415	225 223 72 242 238 168	7:31:53 7:32: 5 7:35:13 7:35:56 7:36:11 7:36:56	-75:43:21 -75:42:20 -70:15:52 -76:58:13 -76:56: 2 -74:10:13	NO 256426 256426 256428	0 · 36 0 : 51 0 : 32	0: 4 2:16 -0:29	A0 A0 B9	7.31 7.31 6.46	.00	122 334 102 250 367	55 9	97 310 38 100 46	131 132? 856 2579 6623	1 . OL 3 . OL 10 . OC 30 . OC	131.000 44.000 85.600 85.967 662.300
897 899 900 901 902 903 904 905 906 907 908 909 911 912 913	919 913 916 917 917 918 919 919 919 919 919 919 919 919 919	169 169 169 169 169 224 226 51 106 107 61 86 59 59 138 351 327	7:36:59 7:37:37 7:37:39 7:37:39 7:37:39 7:40:19 7:40:19 7:42:25 7:43:31 7:43:31 7:43:48 7:43:56 7:45:49 7:45:48	74: 8:40 74: 9:20 74: 9:45 76:31:38 76:30:24 70:18:6 70:17:54 72:28:39 72:27:50 70:55:49 70:55:55 70:55:56:6 70:57:56 70:57:56:16 74:7:24 82:14:14 72:6:37	256428 256428 256428 NO NO NO NO NO NO NO NO NO NO NO NO NO	0:35 0:38 0:39	1:5 0:25 -0:1	89 89 89	6.46 6.46 6.46	.00	369 163 410 191 87 242 104 209 397 154 248 163 210 155 133 170	647 2127 816267 5168267 1009 10357 1009 10357 1009 10357	244 103 115 103 141 62 122 49 350? 124 117 100 126 90	2501 790 11534 776 251 2618 765 2572 806 570 90? 5407 4291 1942 378? 205? 85?	3. 0L 1. 0L 30. 0C 10. 0C 30. 0C 10. 0C 30. 0C 10. 0C 30. 0C 10. 0C 30. 0C 30. 0C 30. 0C 30. 0C 30. 0C	833.667 384.967 25.867 25.100 87.267 76.500 95.733 80.600 190.000 3.000 190.233 429.100 1942.000 4.333 6.833 2.833
915 916 917 919 920 921 922 923 924 925 926 927 928 931 932 933 933	556 +07 552 334 526 524 95 89 91 311 +62 242 242 243 243 245 198 211 188 278	29 124 165 26 19 302 300 300 300 138 25 21 158 149 164 164 164 108	7:48: 8 7:48: 18 7:49:27 7:51: 34 7:53: 8 7:54:20 7:57: 58 7:59: 37 8: 3:31 8: 3:37 8: 14:51 8: 14:51 8: 15:46 8: 15:46 8: 15:54 8: 15:46	-70:26:27 -73:57:46 -70:31:44 -75:32:22 -70:53:24 -70:57:36 -81:16:59 -81:10:17 -75:39:51 -71:59:17 -76:57:14 -77:28:22 -77:10:39 -78:50:43 -78:50:43 -78:50:43 -78:50:43 -78:50:43	NO NO	0:33	0:10	A 0	8.27	.00	370 146 253 302 363 144 126 125 275 87 189 117 159 118 241 119	67 1307 131 202 112 16 16 16 16 16 16 16 16 16 16 16 16 16	350? 125 125 233 350? 141? 96 94 238 62 133? 92 93 93 94 99 93 93	160 157 L 483? 1397? 100 7211? 342? 352? 594? 179? 237 2233 487? 111? 2307? 1761? 244? 10696	3. OL 30. OC 3. OL 3. OL 30. OC 30. OC 30. OC 30. OC 30. OC 30. OC 30. OC 30. OC 30. OC 30. OC	53.333 5.233 16.100 465.667 33.333 240.4E0 11.400 11.733 19.800 59.667 74.4ED 76.233 3.700 76.233 3.700 76.233 3.700 76.233 3.700 76.233 3.700 76.233 3.700 76.233 3.700 76.233 3.700 76.233 3.700
935 936 937 938 939 940 941 942 943	186 175 149 150 285 250 250 252 252	184 193 207 203 90 98 98 94 94	8:16:34 8:16:40 8:18:16 8:18:41 8:19:26 8:24:54 8:24:54 8:25:14	-78:14: 6 -78:30: 3 -79: 8: 1 -79: 6: 14 -75:38: 5 -76:16:38 -76:15:21	256491 256491 256507/ 256508/ 256508/	0:56 1:21 0:56 0:50 1:17 1:11	1:46 3:3 -0:33 -0:16 0:43 1:0	0A 0A SA SA	7.30 7.30 7.14 8.86 7.14 8.86	.00	224 221 96 213 86 89 89 220 220	39 59 13 17 17	197 193 41 102 43 50 50 155	92? 91? 1287 3727 429? 448 448 305 L	3. OL 3. OL 10. OC 30. OC 10. OC 10. OC 10. OC 30. OC	30.667 30.333 128.700 124.233 42.2900 44.800 10.167

OBJECT	×	Y	NORM R.A.	A RA 17:24	SAC	Δ	Δ	SPEC.	v	P	PEAK	NO. OF	BG	DENSITY EXP.& DEN. VOL	,
NO.	687	60	16:11:47	-57:47:22	NO. 243509	R.A. 0: 6	DEC .	TYPE	MAG. 5.86	MAG.	DEN.	POINTS	36	VOLUME FILTER EXP.	
3 4	935 678 931 931	274 79 272 270	16:14: 8 16:14:13 16:14:16 16:14:20	-64:31: 7 -57:54:13 -64:25:38 -64:22:57	NO 243551? NO	0:21	1:35	A	8.89	8.68	264 361 258 70	11 5 13	235 331 234	268 3.0L 89.33 119? 3.0L 39.66 282 3.0L 94.00	33 57
6 7 8	667 933 675	68 266 78	16:14:28 16:14:29 16:14:31	-57:33:36 -64:22:7 -57:48:22	NO 243572 NO 243571?	-0: 1 0: 3	0:52	85 88	9.42	9.29	65 58 375	27 13 21 94	29 37 28 333	823 4.10 200.73 312 L 4.10 76.09 465 3.00 155.00 2104 3.0L 701.33	88
10	673 673 673 675	78 78 78 76	16:14:31 16:14:31 16:14:31 16:14:34	-57:48:22 -57:48:22 -57:48:22 -57:47:47	243581? 243583 243584? 243563?	-0: 6 -0: 8 -0:10 0:20	1: 5 0:12 1: 0 -3:37	88	9.64 7.84 8.81 9.78	9.67 7.61 8.50 9.65	375 375 375 112	94 94 94 89	333 333 333 37	2104 3.0L 701.33 2104 3.0L 701.33 2104 3.0L 701.33 3802 H 4.1C 927.31	33
13 14 15 16	675 675 675 675	76 76 76 76	16:14:34 16:14:34 16:14:34 16:14:34	-57:47:47 -57:47:47 -57:47:47 -57:47:47	2435717 2435817 243583 2435847	0: 5 -0: 4 -0: 6 -0: 7	1:16 1:41 0:48 1:36	88	9.42 9.64 7.84 8.81	9.29 9.67 7.61 8.50	115	89 89 89	37 37 37 37	3802 H 4.1C 927.31 3802 H 4.1C 927.31 3802 H 4.1C 927.31 3802 H 4.1C 927.31	7 7 7
17 18 19 20	677 677 677 677	72 72 72	16:14:36 16:14:36 16:14:36 16:14:36	-57:47: 2 -57:47: 2 -57:47: 2 -57:47: 2	243563? 243571? 243581? 243583	0:22	-2:52 2:1 2:26 1:33	88 80	9.78 9.42 9.64 7.84	9.65 9.29 9.67 7.61	83 83 83	60 60 60	59 59 59	2046 H 3.0C 682.00 2046 H 3.0C 682.00 2046 3.0C 682.00 2046 H 3.0C 682.00	00
21 23 24	677 677 934 680	72 72 274 84	16:14:36 16:14:36 16:14:37 16:14:40	-57:47: 2 -57:47: 2 -64:28:52 -57:59:47	243584? 243605? NO 243582	-0: 5 -0: 33	-0:40	85 88	8.81 9.28 8.63	8.50 9.03 8.29	83 83 54 349	60 60 9	29 30	2046 3.00 682.00 2046 3.00 682.00 194 4.10 47.31	10
25 26 27	797 671 671	80 80	16:14:45 16:14:46 16:14:46	-61: 0:13 -57:46:39 -57:46:39	253503 243571? 243581?	0:40 0:18 0: 9	0:37 2:24 2:49	88 88	9.00 9.42 9.64	8.67 9.29 9.67	169 169	10 14 14	330 30 142 142	199?! 3.0L 66.33 255 L 4.1C 62.19 324 1.0L 324.00 324 1.0L 324.00	10
29 30 31	671 671 671	80 80 80	16:14:46 16:14:46 16:14:46 16:14:46	-57:46:39 -57:46:39 -57:46:39 -57:46:39	243583 243584? 243605? 243612?	0: 5 -0:22 -0:29	1:55 2:44 -0:18 -0:45	88 85 88	7.84 8.81 9.28 9.11	7.61 8.50 9.03 8.83	169 169 169	14	142	324 1.0L 324.00 324 1.0L 324.00 324 1.0L 324.00 324 1.0L 324.00	10
32 33 34 35	794 880 812 809	174 239 189 190	16:14:54 16:15:18 16:15:27 16:15:28	-60:59:49 -63:10:21 -61:28: 1 -61:26:53	253503 253498 253507 253507	-0:31 0:10 -0:34 -0:33	1: 2	88 88 88	9.00 9.30 9.92	8.67 9.29 8.55 8.55	293 51 58 288	16	266 28 28	188 L 3.0L 62.66 89 4.1C 21.70 386 4.1C 94.14 160 L 3.0L 53.33	6
36 37 38 39	689 688 688 673	100 103 103	16:16: 5 16:16: 6 16:16: 6 16:18:12	-58:20:25 -58:22:43 -58:22:43 -58:12:39	243647 243647 243648? 243679?	-0:10 -0:9 -0:13 0:55	-0:10 -2:27 4:22 3:26	88 80 A0	8.70 8.70 9.92 9.43	8.22 8.22 9.78 9.48	67 336 336 163	13	35 316 316 130	335 L 4.1C 81.70 119 L 3.0L 39.66 119 3.0L 39.66 189 H 1.0L 189.00	7
40 41 42 43	739 742 742 742	163 165 165 165	16:19: 4 16:19: 4 16:19: 4	-59:58:44 -60: 2: 3 -60: 2: 3 -60: 2: 3	243711 243711? 253529/ 253530/	-0: 6 0:20 -0: 6	-0:47 -4: 5 -1:51 -0:45	0A 0A 5A	9.19 9.20 9.03	8.91 8.91 9.17 8.59	302 59 59	12	30 30 30	91 L 3.0L 30.33 297 4.1C 72.43 297 4.1C 72.43 297 4.1C 72.43	19
44 45 46 47	714 555 717 553	153 39 152 41	16:19:40 16:19:42 16:19:42 16:19:49	-59:26:28 -55:19:52 -59:27:43 -55:19: 4	243738 243741 243738 243741	-0:11 -0:18 -0:8 -0:10	0:11 0:26 -1: 4 1:14	88 85 88 85	9.40 7.74 9.40 7.74	9.03 7.40 9.03 7.40	308 440 62 195	12 29	279 362 31 149	327 3.0L 109.00 400 L 3.0L 133.3E 301 4.1C 73.41 889 1.0L 889.00	0
48 49 50	559 557 856	33 37 255	16:19:49 16:19:54 16:19:57	-55:20:19 -55:20: 5 -62:59: 5	243741 243741 253532	-0:10 -0:5 0:23	-0: 2 0:12 -0:19	85 85 A2	7.74 7.74 9.70	7.40 7.40 9.52	180	63 5	35? 27	2174 3.00 724.66 4244 H 4.10 1035.02 110 H 4.10 26.82	7
51 52 53 54	523 547 549 752	181 35 28	16:19:59 16:19:59 16:20: 6 16:20: 7	-54:33:57 -55: 5:37 -55: 5:29 -60:23:54	243750 243748 243748 253536	-0:24 -0:16 -0:9 -0:23	0:38 0:46 0:7	83 88 89	8.08 7.86 7.86 9.24	.00 .00 .00 8.89	93 67 55	10? 37 20 6	156? 38 29 30	160 L 1.0L 160.0E 1267 4.1C 309.02 581 L 3.0C 193.66 137 L 4.1C 33.41	57
55 56 57 58	528 526 562 603	17 62 92	16:20:19 16:20:27 16:22:15 16:22:15	-54:35:32 -54:37:1 -55:43:33 -56:47:28	243750 243750 243793 243796	0: 4 0: 3 -0: 2	-1:11 -1:2 -1:2	83 88 88	8.08 8.08 8.08 7.87	.00 .00 7.87 7.50	64 62 74 85	6 20 25	28 37 38 34	356 L 3.0C 118.66 140 L 4.1C 34.14 532 4.1C 129.75 832 4.1C 202.92	6
59 60 61 62	600 605 713 713	94 88 174 174	16:22:16 16:22:16 16:22:18 16:22:18	-56:46:49 -56:46:36 -59:41:12 -59:41:12	243796 243796 243798 243801?	-0: 0 -0: 1 -0: 5 -0:10	-0:32 -0:19 -1:49 -1:15	88 89 89	7.87 7.87 8.66 9.28	7.50 7.50 8.31 9.04	348 61 320 320	5 14 20 20	322 28 271 271	115 L 3.0L 38.33 363 L 3.0C 121.00 658 H 3.0L 219.33 658 3.0L 219.33	10
63 64 65 66	713 713 564 712	174 174 58 175	16:22:18 16:22:18 16:22:21	-59:41:12 -59:41:12 -55:44:25 -59:39:43	243805? 243807? 243793 243798	-0:17 -0:19 0:5 -0:1	-3:30 -1:58 -1:54 -0:20	89 88 89	9.80 8.74 8.08 8.66	9.45 8.45 7.87 8.31	320 320 51	20 20 7 6	271 271 26	658 3.0L 219.33 658 3.0L 219.33 160 L 3.0C 53.33 146 1.0L 146.00	33
67 68 69 70	712	175 175 175 168	16:22:21	-59: 39: 43 -59: 39: 43 -59: 39: 43 -59: 39: 52	243801? 243805? 243807? 243798/	-0: 7 -0:14 -0:16 -0: 2	0:15 -2:1 -0:29 -0:30	89 80 89	9.28 9.80 8.74 8.66	9.04 9.45 8.45 8.31	145 145 145	6 6 6 23	118	146 1.0L 146.00 146 1.0L 146.00 146 1.0L 146.00 842 3.0C 280.66	00
71 72 73	717 717 717	168 168 168	16:22:31	-59: 39: 52 -59: 39: 52 -59: 39: 52	243801/ 243805? 243807/	-0: 8 -0:1 -0:16	0: 5 -2:10 -0:38	89 89	9.28 9.80 8.74	9.04 9.45 8.45	84 84	23 23 23	95 95 95	842 3.00 280.66 842 3.00 280.66 842 3.00 280.66	57 57
74 75 76 77	715 715 715 715	172 172 172	16:22:23 16:22:23 16:22:23	-59: 39: 44 -59: 39: 44 -59: 39: 44 -59: 39: 44	243798/ 243801? 243805? 243807/	-0: 0 -0: 6 -0:12 -0:15	-0:21 0:13 -2:2 -0:30	89 89 A0 89	9.66 9.28 9.80 8.74	8.31 9.04 9.45 8.45	111	35 35 35 35	31 31 31	1394 4.1C 340.00 1394 4.1C 340.00 1394 4.1C 340.00 1394 4.1C 340.00	00
78 79 80 81	705 705 701 701	163 163 169	16:22:44 16:22:44 16:22:46 16:22:46	-59:23:52 -59:23:52 -59:24: 8 -59:24: 8	243806? 243808 243806? 243808	0: 7 -0: 6 0: 9 -0: 3	4:38 -0:33 4:21 -0:50	89 89 89	9.70 8.75 9.70 8.75	9.47 8.37 9.47 8.37	49 49 303 303	7 7	25 25 277 277	87 3.00 29.00 87 L 3.00 29.00 157 3.0L 52.33 157 L 3.0L 52.33	10
82 83 84 85	703 703 570 714	167 167 83 185	16:22:46 16:22:46 16:23:19 16:23:35	-59:23:44 -59:23:44 -56: 7:53 -59:49: 2	243806? 243808 243819 243825?	0: 9 -0: 4 -0: 3 0: 0	4:46 -0:25 1:27 -4:48	89 89 80	9.70 8.75 10.10 9.99	9.47 8.37 9.93 8.63	61 61 344 291	14	29 29 316 272	364 4.10 88.78 364 4.10 88.78 1477 3.0L 49.00 102 3.0L 34.00	10
96 97 98 99	714 716 716 661	185 184 184 151	16:23:35 16:23:43 16:23:43 16:23:56	-59:49:19 -59:49:19 -59:49:19 -58:30:30	243834 243825? 243834 243836	-0:20 0:7 -0:13 -0:5	0: 2 -5: 5 -0:15 -1:12	89 89 89	8.64 8.64 5.78	8.25 8.63 8.25	62 62 62	10 10 51	272 29 29 282	102 L 3.0L 34.00 259 4.1C 63.17 259 4.1C 63.17 2412 L 3.0L 804.00	1
90 91 92 93	661 663 663 568	151 149 149	16:23:56 16:23:57 16:23:57 16:23:59	-58:30:30 -58:30:8 -58:30:8 -56:8:25	243838? 243836 243838? 243835?	-0: 5 -0: 7 -0: 4 -0: 6 -0: 1	3:29 -0:50 3:51 -5:58	A5 B9 A5	9.70 5.78 9.70 9.10	9.76 .00 9.76 9.25	382 219 219 344	51 51 51 5	282 32 32 317	2412 3.0L 804.00 3731 4.1C 910.00 3731 H 4.1C 910.00 1157H 3.0L 38.33	10
94 95 96 97	606 665 665	146	16:23:60 16:24: 3 16:24: 3	-57: 6:13 -58:30:56 -58:30:56 -58:29:39	243836 243836 243838?	-0: 8 0: 1 -0: 1	-0:12 -1:38 3:3 -0:21	89 85 89	7.84 5.78 9.70 5.78	7.43 .00 9.76	332 177 177 176	46 46	302 25 25	162 L 3.0L 54.00 2931 3.0C 977.00 2931 3.0C 977.00 882 1.0L 882.00	10
99 99 100	660 660 608 488	153 153 113 32	16:24: 7 16:24: 7 16:24:10 16:24:12	-58:29:39 -58:29:39 -57: 6:32 -54: 1:52	243836 2438387 243840 2438517	0:53	-0:30 -0:42	A5 A0 A5	9.70	9.76 7.43 9.45	67 64	25 25 8 6	120 37 38	882 1.0L 882.00 882 1.0L 892.00 204 L 4.1C 49.75 149 4.1C 36.34	06

			NORM	A RA 17:24 I	DEC -59:04											
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC. TYPE	V MAG.	P MAG.	PEAK DEN.	NO. OF	86	DENSITY EXP	TEP	DEN. VOL/
	488 961 575 9630 9655 635 635 635 633 599 889 889 889 797 799 843 545 7780 7848	32 358 92 358 136 130 130 130 130 133 134 112 322 324 318 110 266 261 100 98 255 265 265 276	16.24:12 16:24:24 16:24:24 16:24:34 16:24:31 16:24:31 16:24:41 16:24:41 16:24:41 16:24:44 16:24:44 16:26:12 16:26:15 16:26:15 16:26:52 16:27:19 16:27:19 16:27:19 16:27:19 16:27:19	-54: 1:52 -55: 56: 28 -56: 17: 24 -57: 47: 42 -57: 48: 9 -56: 56: 24 -57: 48: 1 -57: 56: 22 -54: 21: 133 -56: 20: 55 -64: 21: 33 -56: 20: 55 -62: 10: 12 -62: 10: 15 -62: 10: 15 -63: 15 -64: 15 -65: 54: 58									38 211 33 30? 29 25 25 25 25 25 25 25 25 31 31 26 30 27 31 23 24 30 24 30 24 30 27 28 29 29 29 20 31 31 31 31 31 31 31 31 31 31 31 31 31	VOLUME FILE 149 L 4. 1164 3. 137 L 4. 1204 4. 651 3. 769 3. 769 3. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 4. 1280 5. 1280 6.	10 00 00 00 00 00 00 00 00 00 00 00 00 0	
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164 165 166 167 168 169 170 171 175 176 177 179 180 181 181 181 181 185 187 189 190 191 193 193 194 195 195 197 199 199 199 199 199 199 199 199 199	581 579 528 528 528 3375 5376 3375 3375 3375 3375 3375 3376	177 183 181 151 151 151 162 62 62 60 60 179 59 59 181 177 56 56 56 56 57 58 58 59 181 117 59 181 117 59 181 118 118 118 118 118 118 118 118 11	16: 34: 23 16: 34: 27 16: 35: 18 16: 35: 18 16: 35: 18 16: 35: 18 16: 35: 18 16: 35: 31 16: 35: 31 16: 35: 31 16: 35: 31 16: 35: 35 16: 35: 49 16: 35: 49 16: 36: 57 16: 36: 57 16: 36: 57 16: 36: 58 16: 36: 58	-57:22:23 -57:22:23 -57:22:23 -57:22:23 -56:7:0 -56:7:0 -52:24:14 -52:24:14 -52:24:14 -52:24:14 -52:24:14 -52:24:14 -52:24:14 -52:24:14 -52:23:6 -52:23:6 -52:23:6 -52:22:40 -53:53:55 -53:56 -53:57:55 -54:00 -54	NO N	0:00 0:11 0:10 0:22 0:12 0:12 0:12 0:12	0:34 -0:35 -4:8 -2:59 -0:41 -0:41 -0:41 -0:43 -0	88809929998955599889555998895559988998998998998	8.78 8.78 8.98 97.46 8.98 97.46 8.98 96.80 8.98 9.12 8.12 8.16 8.16 8.12 8.16 8.16 8.16 9.99 9.90	8. 41 8. 41 9. 10 8. 64 9. 20 00 00 00 00 00 00 00 00 00	73 321 95 5 5 5 5 5 5 1 5 6 1 6 8 0 9 3 2 0 3 1 9 3 2 0	116199 + 2222 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	24 268 30 29 25 31 31 31 22 25 35 35 35 35 35 35 35 35 27 27 27 27 27 28 29 29 29 27 27 27 27 27 27 27 27 27 27 27 27 27	546 3. 7311 2222 L 3. 596 1. 3. 596 3. 1147 3. 3. 1587 3. 3. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 4. 1300 6. 1	0L 0L 0C 1C 0C 0C	128.000 128.293 128.293 128.293 128.293 128.200 128.200 128.200 128.200 128.200 128.200 128.200 138.200 138.200 138.200 138.200 138.200 138.200 139.200 139.200 1422.333 17.273 1109.200 1422.333 17.273 18.200 14.2

		NORM	A RA 17:24	DEC -59:04									
OBJECT X	¥	R.A.	DEC.	5A0 NO.	A.A.	Δ D€C.	SPEC.	MAG.	MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.8 DEN. VOL/ VOLUME FILTER EXP.
## 592 ## 593 ## 594 ## 595 ## 596 ## 597 ## 596 ## 596 ## 597 ## 596 ## 597 ## 596 ## 597 ## 596 ## 597 ##	190 184 188 181 181 181 181 181 181 181 181	16:377:45151103378:1016:388:591126:388:59126:59126:591	56: 49: 114 67: 24: 55: 66: 49: 15: 66: 66: 66: 66: 66: 66: 66: 66: 66: 6	244 0699 244 0699 245 0693 245	5268778696015053061307581933011355311 6708 1119896691017203 1 6300219102110689008181115585811 1119899691001000000000000000000000000000	-0:40341:2291:2661:2991:2661:2991:2661:2991:2661:299	99990000000000000000000000000000000000	8.8.8.6.6.6.2.6.7.7.7.7.8.9.6.6.0.0.9.9.9.8.8.8.0.0.3.8.8.6.6.6.6.6.6.2.9.9.9.8.8.8.0.0.3.8.8.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6	8.00	288 577 497 2556 557 2777 279 495 577 277 279 281 1886 1896 3276 3381 1886 1897 357 557 577 277 279 281 1898 1898 1898 1898 1898 1898 1898	1 6 4 1 5 3 9 4 6 8 0 7 9 5 5 4 6 9 3 6 6 3 3 7 7 7 2 2 8 4 6 7 1 7 0 5 0 4 4 3 0 9 0 0 0 4 6 4 9 9 9 9 7 7 5 2 6 2 1 5 6 1 2 5 3 4 1 1 1 1 2 2 2 2 1 1 1 2 5 3 2 6 1 1 2 2 6 1 1 2 1 1 1 1 1 1 1 1 1 1	5658668937984503756415884555030202227312555527987285878650898986502778347885855599976670006281773420300890076530	264 L 3.0L 68.000

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			NORM	A RA 17:24	DEC -59:04											
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3012330456306789901212332252567899012333233333556789901233323322556789901233333333556789901233323325567899012333233333556789901233323333333333333333333333333333333	398 398 398 398 398 380 402 402 403 403 363 3777 306 353 308 599 306 553 308 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 553 713 308 553 713 308 553 713 308 553 713 308 553 713 308 553 553 713 553 713 553 713 553 713 713 713 713 713 713 713 713 713 71	211371933 200 200 200 200 200 200 200 200 200 2	16: 49: 49 16: 49: 49 16: 49: 49 16: 49: 49 16: 49: 49 16: 49: 51 16: 50: 13 16: 50: 13 16: 50: 33	54:19:38:15:50:50:50:50:50:50:50:50:50:50:50:50:50	244 2553 244 2552 244 2553 244 2553 244 2553 244 2611 253 3 3 3 4 4 2 5 3 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 1 2 2 4 4 2 6 1 2 2 4 4 2 2 4 2 4 2 2 2 4 2 2 2 4 2 2 2 4 2	63776643925175976 250036066564395856896854184184182888655884041485888999001577844448878447847814	1: #57 164 163 223 40 1 1 2 1 2 2 3 3 2 3 4 2 3 1 2 3 2 3 3 4 3 2 3 3 3 5 7 3 3 2 3 3 3 5 7 3 3 3 3 5 7 3 3 3 3 5 7 3 3 3 3	88899888888000000000000000000000000000	7.7.7.1.000 0.000	000 000 000 000 000 000 000 000 000 00	345 66 555 61 140 3 51 166 6 555 61 140 3 51 166 6 555 61 140 3 51 160 160 160 160 160 160 160 160 160 16	315367990748504774177837806560884444433966156958758229941433884223399977744125311637643228889999222599	198765733337331584147357795098844444945557733438853319682691718888282894455531125682665547366887755552826611 2498768733373315844473577950988444449455577334388533196826979638882828944555311256826655473668877555582826611	1656 16	3.0LC 0.0C 3.3.0C 0.0C 1.0C 1.0C 1.0C 1.0C 1.0C 1.0C 1	592 .000 195 .000 195 .000 195 .000 196 .000 196 .000 197 .000 198 .000 199 .000

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			MONHA KY 11:54 DEC -33:04													
JECT NO.	x	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC . TYPE	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY VOLUME		DEN. VOL/ EXP.
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502	296	324		-53:24: 3	244532	-0:11	0:11	88	8.12	7.70	309	29	105	1499	3.0L	499.667
503	298	321		-53:24:20	244532	-0:11	-0:6	88	8.12	7.70	149	33	25	1731	4.10	422.195
504	705	486		-62:41:46	253841	-0:14	-1:11	88	7.23	.00	147	32	27	1673	3.0C	557.667
505	702	490	17: 9:26	-62:41: 9	253841	-0:10	-0:34	88	7.23	.00	199	37	32	2300	4.1C	560.976
506	701	493	17: 9:28	-62:40:37	253841	-0:8	-0: 2	BB	7 23	0.0	159	21	87	852		852 000

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NORMA	RA	17	24	DEC	-50	114	

NORMA RA 17:24 DEC - 595/04 OBJECT X Y R.A. DEC. SAO	
601 502 v77 1719 02 -98 58 17 2 v498 3 -01 1 -129 88 6.78 .00 233 v 602 v60 v61 1719 02 -98 58 17 2 v4963 -00 1 -129 88 6.78 .00 230 2 6 6 6 5 v60 v60 2 1 603 v60 v60 1719 v4	25

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NORMA	RA	17:24	DEC	-59:04	

133080	×	Y	R.A.	DEC.	SAO	Δ	4	SPEC	. v	Р	PEAK	NO. OF	BG	DENSITY EXP. & DEN. VOL/
NO.					NO.	R.A.	DEC.	TYPE	MAG.	MAG.	DEN.	POINTS		VOLUME FILTER EXP.
701 702 703 704 705 706 707 708 709 710 711 712 713	809 236 235 239 236 487 488 603 490 599 600 600	660 477 475 469 472 558 556 588 553 594 592 592	17: 31: 28 17: 31: 30 17: 31: 31 17: 31: 32 17: 31: 34 17: 31: 41 17: 31: 45 17: 31: 50 17: 31: 51 17: 31: 55 17: 31: 55 17: 31: 55	-65:59:13 -53:20:23 -53:19:57 -53:20:25 -53:19:41 -58:53:48 -58:53:48 -61:24:46 -61:24:46 -61:24:15 -61:24:24	253970 244870 244870 244870 244870 244874 244874 253976 253980? 244874 253980? 253980?	0:13 0:13 0:14 0:15 0:17 -0:5 -0:1 -0:11 -0:35 0:4 -0:7 -0:6 -0:31	-1:18 -1:10 -0:44 -1:12 -0:28 -0:48 -0:56 -1:49 -2:30 -0:30 -1:18 -1:27 -2:8	A0 A0 A0 A0 B9 B9 B9 B9 B9 B9	7.53 6.27 6.27 6.27 6.27 8.28 8.28 9.05 10.20 8.28 9.05	.00 .00 .00 .00 7.86 7.86 8.73 9.92 7.86 8.73	103 123 279 115 148 222 75 58 58 57 233 69	27 11 24 25 32 9 10 7 7 5 10	24 78 181 22 27 182 28 20 20 22 183 23	1179 H 4.1C 287.561 13.0L 343.000 1200 3.0L 400.000 1196 3.0C 399.333 1805 H.1C 40.294 262 L 3.0L 87.333 323 H.1C 78.780 209 3.0C 69.667 209 3.0C 69.667 147 L 3.0C 49.000 348 3.0L 116.000 348 3.0L 116.000 349.000
714 715 716 717 718 719	946 949 387 388 391 537	715 710 555 553 550 600	17:32: 2 17:32: 5 17:35:33 17:35:40 17:35:41 17:36:12	-68:55:50 -68:56: 9 -56:51:13 -56:51:26 -56:52: 8 -60:10:56	NO NO 244922 244922 244922 253997	-0: 2 0: 5 0: 5	-0:18 -0:32 -1:13	89 89 89	8.73 8.73 8.73 9.88	8.39 8.39 8.39 8.53	105 70 238 75 54 53	9 6 10 14 6	25 23 186 26 22 23	388 4.1C 94.634 187 3.0C 62.333 364 3.0L 121.333 440 4.1C 107.317 170 L 3.0C 56.667 102 L 4.1C 24.878
720 721 722 723 724	764 387 391 388 744	685 581 575 579 684	17:38:43 17:39:12 17:39:13 17:39:18 17:39:19	-65:16:55 -57: 1:32 -57: 0:54 -57: 1:51 -64:51:34	244967 244967 244967 NO	-0: 5 -0: 4 0: 2	-1:34 -0:56 -1:53	89 89 89	6.88 6.88 6.88	.00	60 341 149 192 102	6 36 34 39	25 182 23 26	181? 4.1C 44.146 2216 3.0L 738.667 1874 3.0C 624.667 2566 4.1C 625.854 95 1.0L 95.000
725 726 727	743 388 743	681 584 683	17:39:20 17:39:22 17:39:23	-64:50:42 -57: 2:15 -64:51:35	NO 244967 NO	0: 5	-2:17	89	6.88	.00	101 155 240	22 17 22	25 79 176	942 4.1C 229.756 787 1.0L 787.000 885 3.0L 295.000
729 730 731 732 733 734 735 736 737	746 180 182 184 181 250 254 251 607	678 525 522 519 528 554 548 551 660 659	17:39:30 17:40:17 17:40:18 17:40:20 17:40:23 17:41:9 17:41:9 17:41:53 17:41:58	-64:51:20 -52:36:28 -52:37:37 -52:35:48 -52:37: 8 -54: 7: 6 -54: 7: 5 -61:57:37 -61:57:39	NO 244976 244976 244976 244976 NO NO NO NO NO	0:17 0:18 0:20 0:23	-1: 1 -2:10 -0:21 -1:41	88 88 88	7.90 7.90 7.90 7.90 7.90	7.50 7.50 7.50 7.50 7.50	81 233 106 82 101 220 60 75 125 289	15 24 62 62 64 84 94	23 170 30 22 73 176 22 26 77 183	565 3.0C 188.333 880 3.0L 293.333 1102 4.1C 268.780 791 3.0C 268.667 148 L 1.0L 148.000 419 3.0L 139.667 236 3.0C 78.667 460 4.1C 12.195 295 1.0L 295.000 706 3.0L 295.000
738 739 740 741 742 743 744 745 746 747	343 608 605 801 345 804 801 771 801 771	591 658 662 723 590 718 722 713 725 715	17:42:22 17:42:50 17:42:55 17:43:9 17:43:10 17:43:15 17:43:15 17:43:20 17:43:22 17:43:25	-56:11:27 -61:57:33 -61:57:19 -66:13:18 -56:11:20 -66:13:4 -66:12:50 -65:34:12 -66:12:22 -65:34:59	NO NO 245020? NO NO NO NO	0:10	-6:27	A0	10-00	9.93	216 135 162 235 60 89 119 99 101 225	11 14 17 31 21 25 35 24 7	183 22 25 175 23 22 27 26 75	2797 3.0L 93.000 8399 3.0C 279.667 994 4.1C 242.439 1147 3.0L 382.333 549 3.0C 183.000 999 3.0C 333.000 1603 4.1C 390.976 999 4.1C 243.659 167 1.0L 167.000 629 3.0L 909.667
748 749 750 751 752 753 755 755 756 757 758 759 760 761	774 271 272 274 487 486 595 591 595 214 218	709 582 579 576 640 637 668 672 676 676 585 585	17:43:31 17:44: 5 17:44: 6 17:44: 6 17:44: 16 17:44: 16 17:44: 22 17:44: 60 17:45: 4 17:45: 5 17:46:41 17:46:43	-65:39:45 -54:41:33 -54:41:3 -59:24:20 -59:24:20 -59:24:20 -59:24:20 -59:24:24 -61:44:32 -61:44:32 -61:44:5 -61:44:5 -61:44:5 -61:44:5 -53:35:36 -53:35:57	NO 245031 245031 245031 245028? 245047 245047 254048 254048 254048 254048 245065 245065	0:13 0:13 0:15 0:39 -0:15 -0:19 -0:15 -0:10 -0:10 -0:10	-0:28 -0:32 0:9 1:30 -2:9 -1:29 -2:35 -2:48 -2:35 -2:48 -2:35 -2:48	88 88 89 89 89 89 89 89 89 89 89 89	8.8 4.4 900 8.8 9.4 9.0 00 8.6 66.662 9.9 9.0 00 8.6 66.662 9.9 9.0 00	8.46 8.46 9.52 9.10 8.10 00 00	81 81 61 83 61 232 168 196 353 172 402 459	21 11 17 8 16 16 10 14 36 41 37 25 90 187	22 174 27 22 23 23 20 181 22 25 183 79 169 26	749 3.0C 249.667 348 L 3.0L 116.000 559 4.1C 136.341 238 L 3.0C 79.333 578 4.1C 136.341 3.0C 19.335 3.0C 19.335 3.0C 19.335 2607 4.1C 19.2.976 3.0L 158.333 2807 4.1C 684.634 2590 3.0L 158.333 1141 1.0L 1141.000 8789 1.0L 8789.000 16133 3.0L 5377.667 13681 3.0C 5377.667
763 764 765 766 767 768 769 770	215 427 189 183 190 193 191	582 649 583 578 578 587 578 581	17:46:44 17:47:14 17:47:25 17:47:27 17:47:27 17:47:32 17:47:34 17:47:34	-53:35:29 -58:12: 2 -53: 6: 5 -52:57:10 -52:57:10 -53: 6:39 -53: 7: 1 -53: 7:47	245065 245072 245071 245074? 245072 245072 245072	0:20 0:17 0:20 0:12 0:24 0:26 0:26	0:24 0:57 0:1 -2:1 0:23 0:1	83 89 80 80 80	5.90 6.40 9.42 10.20 6.40 6.40	.00 9.02 10.07 .00 .00	432 111 243 55 55 108 113 145	155 9 21 7 7 10 28 33	35 79 167 29 29 70 25 33	17202 4.10 4.95,610 248? 1.0L 248.000 934 3.0L 311.333 157 4.10 38.293 157 4.10 38.293 296 1.0L 296.000 1279 3.0C 426.333 1824 4.10 444.878
7712 7713 7714 7715 7716 7717 7719 781 782 781 782 784 786 786 790 791 791 791 791 791 796 797 798 797 798	721 919 159 155 156 956 956 956 956 956 957 318 389 240 240 357 357 357 357 357 367 373 373 373 373 373 373 37	723 5720 5796 583 669 674 669 674 6639 667 665 662 633 630 669 674 667 787 783 698 787 790	17: 47: 48 17: 48: 49 17: 48: 49 17: 48: 56 17: 49: 57 17: 49: 49: 7 17: 49: 49: 7 17: 49: 49: 7 17: 50: 33 17: 50: 33 17: 50: 33 17: 50: 33 17: 50: 33 17: 51: 44 17: 52: 27 17: 53: 19 17: 53: 11 17: 53: 12 17: 53: 19 17: 58: 48	-64: 38: 18 -58: 33: 36 -63: 58: 35 -52: 29: 7 -52: 28: 50 -52: 29: 2 -58: 54: 55 -58: 54: 58 -58: 55: 54: 58 -57: 26: 54: 55 -57: 26: 54 -57: 25: 25 -54: 20: 34 -56: 53: 21	245085 255064 245087 245087 245103 245103 245103 245103 245108 245108 245108 245121 245121 245127 245127 245127 245133 24513	-0:17 -0:12:60 0:22:61 0:22:61 0:22:61 0:22:61 0:22:61 0:22:61 0:22:61 0:22:61 0:22:61 0:23:61 0:23:61 0:24:61	-1:38 -1:39 -0:51 -0:51 -0:51 -0:51 -0:51 -0:51 -0:39 -0:35 -0:22 -0:22 -0:23 -0:25 -0:26 -0:26 -0:26 -0:26 -0:26 -0:26 -0:26 -0:51	90098998998888889988888899888888888888	91177	9 61 7 53 7 800 7 800 7 300 7 300 7 300 000 000 000 000 000 000 000 000 000	55 207 178 178 265 115 115 222 232 758 251 123 108 251 125 263 275 280 280 280 280 280 280 280 280 280 280	5 4 7 4 10 20 11 12 10 11 12 12 13 9 24 7 24 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	26181521571886676224121712187322723811786773227238117867732274	1237 4.1C 30.000 94 3.0L 31.333 179 4.1C 43.659 91 6.3.0C 78.3333 255 6.3.0L 78.3333 258 4.1C 72.683 857 3.0L 285.667 1066 4.1C 267.000 267 1.0L 287.000 267 1.0L 287.000 267 3.0C 266.333 366 6.3.0L 128.667 3308 6.3.0L 128.667 3308 6.3.0L 128.667 3308 6.3.0L 128.667 3308 1.3.0C 309.333 1260 4.1C 94.146 2496 1.3.0C 309.333 1260 4.1C 94.146 2596 1.0L 2675.000 6740 4.1C 1643.902 4592 3.0L 1550.667 2675 1.0L 2675.000 5166 3.0C 309.333 276 1.0L 2675.000 5166 3.0C 309.333 276 1.0L 2675.000 5166 3.0C 309.333

			NORM	A RA 17:24 (DEC -59:04											
OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY 70LUME	E/P.4 F:L'EF	DEN. /OL/
108	728	789	17:58:55 18: 0:18	-65: 6:43 -55:31:20	254121	0:29	-0:58 3: 4	88	8.28	.00	230	25 11	170 168	950 369 L	3. OL 3. OL	316.667 123.000
803	284	699 703	18: 0:20	-55:30:52	245218	-0: 4	3:32	88	8.43	8.00	60 77	11	58	318 L 553	3.00	106,000
805	455	747	18: 0:26	-55:32: 7 -58:34:32	245218	-0:27	0: 2	85	7.21	.00	216	31	76	1871	1.52	:871.000
806 807	420	745	18: 1:40	-58:33:14 -58:34: 4	245237	-0:27	1:20	85 85	7.21	.00	383	46 57	180	3330 +564	3. DL	1110.000
808	424	739	18: 1:47	-58:34:19	245237	-0:19	0:15	85	7.21	.00	219	48	24	3414	3.00	::38.000
810	296	755	18: 6:37	-56: 5: 8 -56: 5: 8	245288 245290?	-0:15 -0:25	3:38	89 A0	8.90	9.91	555	19	170	641	3. DL 3. DL	2:3.667
811	297	752	18: 6:38	-56: 4:35	245288	-0:14	3:16	89	8.90	8.41	81	16	27	569	4.10	: 38 780
813	297	752	18: 6:38	-56: 4:35	2452907	-0:24	3: 8	89	8.90	9.91	81 60	16	27	569	4.1C 3.0C	: 39.780
814	300	749	18: 6:39	-56: 4:44	245290?	-0:23	4: 2	AO	10.10	9.91	60	16	26	419	3.0C	: 39 . 667
815 816	541	797	18: 7:31	-61:15: 4	254170	-0:19 -0:17	-0:14	85	8.34	7.87	97 262	56 55	179	871 L	3.0C 3.0L	378.000
817	538	801	18: 7:33	-61:16:22	254170	-0:16	-1:31	85	8.34	7.87	156	58	27	1347	4.1C	328 537
818	539	805 867	18: 7:34	-61:16:36 -66:54:18	254170 NO	-0:15	-1:45	85	8.34	7.87	112	9	75	2062 L	1 - OL	261 -000
850	803	863	18:10:32	-66:54:14	NO						71	35	23	1161	3.0C	387.000
821	800	869	18:10:40	-66:54:28	NO	0.00	0. 3	AO	7.70	7.30	515	36 27	164	1204	3.0L	302 683
853	454	815	18:11:50	-59:34:48 -59:33:56	245361 245361	-0:29	0:2	AO	7.70	7.30	248	23	27	929	3 - OL	309.667
824	456	812	18:11:56	-59:33:38	245361	-0:23	1:12	AO AO	7.70	7.30	90	55	24	833 153	3.0C	277.667 153.000
825 826	386	820	18:11:59	-59:33:52 -58: 9:19	245361 245368	-0:20	2:50	AU OA	8.81	8.32	533	51	171	811 H		270.333
827	387	809	18:12:30	-58:10:24	245368	-0:22	1:45	AO	8.81	8.32	95	21	29	793 H	4.10	193.415
829	388	814	18:12:32	-58:11:56 -58:10:27	245368 245368	-0:20 -0:19	0:13	A O	8.81	8 . 32	97	16	73 25	507 L	1 . OL 3 . OC	169.000
830	585	795	18:12:37	-56: 0:12	245369	-0:18	2:18	85	5.54	.00	463	145	173	15012	3 . OL	5004.000
831 832	583	792 789	18:12:38	-55:59:49 -55:59:51	245369 245369	-0:17	2:40	85 85	5.54	.00	415	152	33	19057	4.1C 3.0C	4688.667
833	283	798	18:12:46	-56: 0:20	245369	-0: 9	5: 9	85	5.54	.00	400	86	75	8778	1 . OL	8778.000
835 835	653	861	18:14:28	-63:54:13 -59:50:54	254204	0:17	0:50	88	8.59	8.33	52 367	6 85	26	8890 H	4.10	2168.293
8 36	461	845	18:15:45	-59:51:11	245405	-0:28	0:34	88	7.21	.00	439	91	179	8880 H		2960.000
837 838	464	839	18:15:45	-59:50:56 -59:51: 3	245405	-0:29 -0:25	0:49	88	7.21	.00	325	75 57	76	6743 H		2247.667 4336.000
839	321	824	18:16:18	-56:55:28	245411	-0:13	1:52	89	7.73	.00	1 36	44	58	55.25 H		544 . 390
840 841	355	830 827	18:16:19	-56:55:37 -56:54:30	245411	-0:12	2:50	89	7.73	.00	115	43	167	522 H		522.000
8+2	324	821	18:16:21	-56:54:12	245411	-0:10	3: 8	89	7.73	.00	108	32	24	1457	3.0C	485 - 667
844	446	965 968	18:19:44	-59:38:54 -59:37:49	245441	-0:12	0:19	89	7.56	.00	272	40	171	2140 H		521 - 951 676 - 667
845	449	862	18:19:49	-59:37:37	245441	-0: 7	0:59	89	7.56	.00	111	32	25	1415	3.0C	471.667
846 847	247	870 839	18:19:52	-59: 37: 39 -55: 30: 45	245441	-0: 4	0:56	89	7.56	.00	109	15	70 2 8	127?	1.0L	30.976
8+8	569	921	18:27:18	-65:50:55	254273	0:35	-1:36	88	4.81	.00	441	159	58	20358	3.0C	6786.000
849 850	569 566	921	18:27:18	-62:20:22 -62:20:27	2542757	0:26	-0:21	88 85	7.76	.00	441	159	178	20358	3.0C	6786.000 7658.000
851	566	927	18:27:19	-62:20:27	254275?	0:28	-0:27	SA	7.76	.00	472	194	178	22974	3. OL	7658-000
852 853	566 566	925	18:27:21	-62:20:39 -62:20:39	254273	0:38	-1:53 -0:38	88 88	7.76	.00	451	196	34	25483	4.10	6215.366
854	567	929	18:27:24	-65:50:10	254273	54:0	-1:24	88	4.81	.00	415	124	72	14287	1 . DL	14287.000
855	567	929	18:27:24	-62:20:10	254275?	0:33	-0:10	5A	7.76	.00	415	124	72	14287	1.0L	14287.000

AGUARTUS	RA	22.56	TO	23	16	DEC	-05-06	TO	-07-12	

			AQUA	RIUS RA 22:	58 TO 23:1	e oec -o:	5:06 10	-03:12								
NO.	×	Υ .	R.A.	D€C.	NO.	R.A.	DEC.	SPEC.	MAG.	MAG.	DEN.	NO. OF POINTS	BG	DENSITY VOLUME	FILTER	DEN. VOL/
NO. 10123 1045 1051 1051 1051 1051 1051 1051 1051	8 3 3 0 4 5 1 1 6 2 1 6 2 6 2 6 6 1 2 7 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	747 120 122 380 645 577 648 581 581 110 1113 534 466 464 464 464 464 464 464 4		0EC. -8: 6: 38 -3: 77: 333 -4: 22: 31 -4: 23: 47 -6: 15: 22 -7: 25: 16: 16: 16: 16: 16: 16: 16: 16: 16: 16	SAO	A	A DEC	SPECE	VMAG. 6.85 7.70.77.701 7	MAG	DEN. 766 500 677 678 678 678 678 678 678 678 678 678	155265594456619627739020050505050505050505050505050505050505	1686216244232926636622916848776626221884292627186936529168897766221884971607713897715220257188971558070652198307065219807065219830706521983070652198307065219830706521983070652198307065219830706521983070652198307065219830706521983070652198307065219830706521983070652198307065219830706521983070652198507065219807065219807065219807065219807065219807065219807065219807065219807065219807065219807065219807065219807065219807065219807065219807060000000000000000000000000000000000	VOLUME 576 1317 3221 1858 1173 1173 1173 1173 1173 1173 1173 117	3. 0C 30. 0C 10. 0C 3. 0C 3. 0C 10.	192.000 193.200 195.867 22.200 195.867 22.6000 195.200 197.8000 195.200 197.8000 197.8000 197.8000 197.8000 197.8000 198.667
170 171 173 174 176 177 178 180 181 182 183 184 186 188 189 199 199 199 199 199 199 199 199	29099 919099 91909 9100 910	769 769 769 769 622 553 620 610 555 810 808 808 808 808 808 808 808 808 808	23:16:30 23:16:31 23:17:18 23:17:18 23:17:18 23:17:20 23:17:22 23:17:22 23:17:22 23:17:23 23:17:25 23:17:55 23:18:14 23:18:18 23:18:18 23:19:19 23:19:19 23:19:15 23:19:15 23:19:15 23:19:15 23:19:15 23:19:25 23:19:25 23:19:25 23:19:25	-9:50:49 -9:51:21 -9:51:32 -9:51:32 -5:27:29 -5:25:11 -5:25:11 -5:25:10 -5:29:29 -9:10:28 -9:19:13 -9:19:13 -9:19:13 -9:19:13 -9:19:13 -9:19:13 -9:19:13 -9:19:13 -9:19:13	1 65622 1 1 6635 1 1 6635 1 1 6635 1 1 6635 1 1 6635 1 1 6650 1 1 6565 1 6 656 1 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	0: 84 99 9 8661033 7530066600000000000000000000000000000000	2:19 -3:16 -1:43 1:31 1:41 4:24 -0:36 0:22 2:56 3:24 0:27 -0:25 -0:25 -0:25	A00 A00 A00 A00 B033330B033330B03333333333	5.16 5.16 5.16 5.16 8.40 8.40 8.40 7.60 7.60 7.60 7.60 7.60 7.60 7.60 7.6	.00	376 517 127 1252 101 102 102 103 103 103 103 103 103 103 103 103 103	63 1323 131 181 167 214 7 93 3 7 7 28 8 90 1 338 1 96 667 67 667 67 67 67 67 67 67 67 67 67	1359 1312 1312 1312 1313 1313 1313 1313 131	5325 3952 41165 16481 4763 591 1256 1000 1302 1488 186 5209 1221 174 105 25987 18185 9668 4442 H	10 . 0C 30 . 0C 30 . 0C 30 . 0C 3. 0L 10 . 0C 3. 0C 10 . 0C 10 . 0C 3. 0C 10 . 0C 3. 0C 10 . 0C 10 . 0C 3. 0C 10 . 0C 10 . 0C 10 . 0C 10 . 0C 3. 0C 10 . 0C	1775.000 379.5000 379.5000 379.2167 164-8.100 158.833 157.767 197.000 125.600 100.000 1130.200 162.607 62.607 62.607 62.607 62.607 63.633 122.100 159.000

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AQUARIUS RA 2	2:58 10	23:16	DEC	-05:06	TO	-03:12
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OBJECT NO.	x	Y	R.A.	D€C.	SAO NO.	R.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BC	DENSITY EXP.8	
201	465	521	23:19:51	-3:24:60	NO						100	6	63	176 1.0L	176.000
505	466	525	23:19:54	-3:24:48	NO						217	11	146	454 3.0L	151.333
203	603	234	23:20:13	2:29:31	128150	-0: 7	-3: 8	AO	6.92	.00	59	10	14	320 L 3.00	106-667
204	242	233	23:20:17	2:31:28	128150	-0: 3 0: 1	-1:11	AO AO	6.92	.00	103	104	18	5082 30.0C 5564 30.0C	169.400
205	458	231	23:20:23	2:32:7	128150	0: 1	-0:32	AO	6.92	.00	155	29	15	1560 10.00	185.467
207	447	231	23:20:24	2:33:56	128150	0: 4	1:17	AO	6.92	.00	165	9	130	245 L 3.0L	81.667
808	231	144	23:20:27	2:33:25	128150	0: 7	0:46	AO	6.92	.00	72	37	18	1265 L 10.00	126.500
509	585	60	23:21:42	5:55:36	158165	-0: 7	0:54	AO	7.14	.00	74	30	17	1096 3.00	365.333
210	428	53	23:21:57	5:52:55	158165	0:8	-1:47	AO	7.14	.00	89	8	63	186 1.0L	186.000
211	430	57	23:21:58	5:53:10	158165	0: 9	-1:32	AO	7.14	.00	165	51	81	1004 L 10.0C	100.+00
215	438	59	53:55: 1	5:52:50	158165	0:12	-1:51	AO	7.14	.00	284	171	55	17920 30.0C	597.333
213	437	926	23:24: 8	-11:22:19	165696	-0: 5	-3:52 -3:30	88	8.40	.00	121	242	59	33413 H 30.0C	1113.767
214	424	921	23:24: 9	-11:21:57	165696 165696	-0: 1 -0: 1	-3:30	88	8.40	.00	307	104	24	9639 H 10.0C	963.900
216	425	924	23:24:11	-11:20:27	165696	0: 1	-1:59	88	8.40	.00	284	73	137	4523 H 3.0L	1507.667
217	558	317	23:24:14	0:56: 4	128186	-0: 8	-2:50	SA	4.94	.00	157	27	14	1637 3.00	545.667
218	194	535	23:24:15	0:57:50	128186	-0: 7	-1: 4	SA	4.94	.00	265	177	21	17980 30.0C	599.333
219	125	559	23:24:19	0:57:12	128186	-0: 3	-1:42	A2	4.94	.00	83	34	14	1392 3.00	464.000
550	183	227	23:24:24	0:59:43	128186	0: 5	0:49	A2	4.94	.00	550	85	16	6490 10.0C	649.000
551	174	530	23:24:25	0:59:58	158186	0: 3	1: 4	A2	4.94	.00	176	39	113	1419 L 3.0L	473.000
555	583	927	23:24:25	-11:19:14	165696	0:15	-0:46	88	8.40	.00	141	52 45	55	2875 H 3.0C	958.333
553	145	847 846	23:24:26	-11:22:21	165696 165696	0:17	-3:54	88	8.40	.00	86	110	16	1806 3.0C 8560 H 10.0C	602.000 856.000
224	501	849	23:24:27	-11:22:29	165696	0:17	-4: 2	88	8.40	.00	283	230	55	24088 30.0C	802.933
556	400	311	23:24:28	0:58:33	128186	0: 6	-0:21	SA	4.94	.00	123	18	55	706 1.0L	706.000
227	172	559	23:24:29	1: 0:23	158186	0: 7	1:29	SA	4.94	.00	77	12	49	293 L 1.0L	293.000
558	412	316	23:24:29	0:58:17	128186	0: 7	-0:37	A2	4.94	.00	332	142	50	16039 30.0C	534.633
559	401	314	23:24:31	1: 0: 0	128186	0: 9	1: 6	A2	4.94	.00	566	33	159	1893 3.OL	631.000
230	403	314	23:24:31	0:58:44	158186	0: 9	-0:10	A2	4.94	.00	304	61	50	5279 10.0C	527.900
231	192	848	23:24:32	-11:55: 1	165696	0:55	-3:34	88	8.40	- 00	88	58	47	848 H 1.0L	848.000
535	194	849	23:24:32	-11:21:16	165696	0:55	-2:48	88	8.40	.00	208	17	115	3317 H 3.0L 500? 30.0C	1105.667
233	171	569 569	23:26:17	0:15:51	NO						138	4	112	95 3.0L	31.667
235	168	271	23:26:26	0:13:34	140						83	14	55	573? 30.0C	19.100
236	543	559	23:26:39	-3:57:10	146732	-0: 9	-4:54	AO	8.50	.00	56	12	14	349 3.0C	116.333
237	389	556	23:26:43	-3:54:32	146732	-0: 5	-2:16	A0	8.50	.00	111	35	16	1644 10.0C	164.400
238	174	481	23:26:44	-3:57:49	146732	-0: 4	-5:33	AO	8.50	.00	118	97	51	5170 30.0C	172.333
539	385	553	23:26:44	-3:54:38	146732	-0: 3	-5:55	AO	8.50	.00	89	4	64	99 1.0L	99.000
240	397	557	23:26:46	-3:53:41	146732	-0: 5	-1:25	AO	8.50	.00	130	83	18	5206 30.0C	173.533
241	386	556	23:26:47	-3:53:13	146732	-0: 1	-0:57 -5:11	AO AO	8.50 8.50	.00	206	13	147	463 3.0L 91 L 3.0C	154.333
242	105	478	23:26:49	-3:57:27 -3:57: 2	146732	0: 1	-4:46	AO	8.50	.00	85	36	16	1407 10.00	140.700
244	154	479	23:26:52	-3:55:21	146732	0: 5	-3: 5	ÃO	8.50	.00	147	13	115	326 3.0L	108.667
245	234	203	23:38:14	3:19:38	158355	-0: 4	-1:21	AO	8.90	.00	58	23	16	690 10.0C	69.000
246	241	205	23:38:22	3:20:45	128322	0: 4	-0:14	AO	8.90	.00	78	72	19	2856 30.0C	95.200
247	550	401	23:40:44	-0:29:41	146860	0: 0	-3:42	AO	8.40	.00	46	17	50	386 L 30.0C	12.867
248	97	590	23:50:10	1:47:18	128436	-0:21	-1:28	AO	6.24	.00	551	196	19	17367 30.0C	578.900
249	85	586	23:50:25	1:50:12	128436	-0: 6	1:27	AO	6.24	.00	152	93 37	17	5505 10.0C 1216? 3.0C	550.500
250	240	589	23:50:40	2: 3:44	1200.55	-0:29	-1:37	SA	8.20	.00	67	17	12	408 L 30.00	13.600
251	81	272	23:51:23	2: 9:33	128456	-0:29	-1:3/	AC.	0.20	.00	40	11	1.6	400 L 30.0C	13.000



			SGR	NORMAL RA 11	9:34 DEC -	30:24									
OBJECT NO.	×	Y	R.A.	DEC.	NO.	R.A.	DEC.	SPEC.	MAG.	MAG.	DEN.	NO. OF POINTS	BG	DENSITY EXP. & VOLUME FILTER	DEN. VOL / EXP.
12345678901123456789012345678990123456789901234567899012345678990166666666666666777777777898888888889999990	7*55 6895 690 6882 7772 8106 6890 6882 7772 8106 6890 6882 7779 8107 6896 6897 7799 8107 6896 6897 7896 6897 7896 6897 7896 6897 7896 6897 7896 6897 7896 6897 7896 6897 7896 6897 7896 6899 9897 7896 6899 9997 7896	80 65 65 66 66 67 68 69 67 69 69 67 69 69 69 67 69 69 69 69 69 69 69 69 69 69	17:49:181 17:49:181 17:49:181 17:59:181	31: 37: 11 31: 35: 26 30: 13: 39: 22 30: 33: 11: 23 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 14: 32 30: 33: 32: 33: 32 30: 33: 32: 33: 33: 33: 33: 33: 33: 33: 33	209399 209399 185914 209456 209460 209474/209486/209486/209486/209503 209503 209503 209503 2095067 2093067 2093067 2093067 2093067 2093067 2095068 209507 2095068 209507 209508 20	20 289 4857 466883 4113 422275 1284 5172 1211777 7801 68989 35865 12017628 1314583 22275 1284 5172 12811777 7801 6898 34115 4588 131458 33150 22275 1284 5172 12811777 7801 6898 35165 12017628 1131458 33150 22275 12811777 7801 6898 35165 120176 1281177 128117 128	0:183 -0:0669-1:911-0:337 -0:337 -0:183 -0:1	888 88303300 9999409988888888888888888888888888888	8.62 9.066 8.59 9.066 8.65 9.066 9.066 8.65 9.066 9.06	8. 33 8. 000 9.000 8. 7. 20 9.000 8. 7. 20 9.000 9.000 9.000 9.000 9.000 9.000 9.000 9.000 9.000 9.000 9.26 9.26 9.26 9.26 9.26 9.26 9.26 9.26	577 5111 856 888 888 889 159 169 169 179 189 189 189 189 189 189 189 18	13311032666111138990089554901189553701661194553775537543660117568082266633711879948890835444377553754366011756808226663371187994889083544437755375436601175680822666337118799488908354443775537543660175680822666337118799488908354443775537543660175680822666337118799488908354443775537543660175680822666337118799488908354443775537543660175680822666337118799488908354443775537543660175680822666337118799488908354443775537543660175680822666337118799488978897889788978897889788978897889	71487 71487	7110 1.0L 592 10.0C 31229 10.0C 403 3.0C 2387 H 10.0C 2387 H 10.0C 464 L 10.0C 464 L 10.0C 469 L 10.0C 151 L 10.0C 152 L 10.0C 151 L 10.0C 152 L 10.0C 152 L 10.0C 1530 L 10.0C 3530 L 3.0C 150 L 10.0C 3550 L 10.0C 3550 L 10.0C 1282 L 10.0C 1282 L 10.0C 35520 L 10.0C 1285 L 10.0C 35520 L 10.0C 15865 10.0C	105. 667 108. 100 26. 400 36. 500 37. 500 37. 500 37. 500 37. 500 37. 600 37. 660 37. 660 38. 333 221. 900 25. 200 25. 200 25. 200 25. 200 25. 200 25. 200 27. 200 28. 333 261. 900 27. 700 28. 333 27. 700 27. 700

SCR	NORMAL	PA	10.74	DEC	-30:24

OBJECT NO.	х у		DEC.	SAO NO.	Δ R.A.	DEC.	SPEC	V MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
1012345678990112345678990123456789901234567899012345678990123456789901234567899012345678990123456789900123456789900123456789901234567899012345678990123456789901234567899001234567899001234567899001234567899001234567899001234567899001234567899000123456789900012345678990001234567899000123456789900000000000000000000000000000000000	607 145 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 519 111 517 11	17:59: 2:22 18: 11: 12: 2:22 18: 11: 12: 2: 2:22 18: 11: 12: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2	0 - 35: 36:52 0 - 35: 36:52 0 - 35: 36:52 0 - 35: 36:55 0 - 35: 36:55 0 - 35: 36:35 1 - 35: 36:35 1 - 35: 36:35 1 - 35: 36:35 1 - 35: 36:35 1 - 35: 36:35 1 - 35: 36:35 1 - 35: 36:35 1 - 36: 37: 36: 36 1 - 36: 37: 36: 36 1 - 36: 37: 36: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 36 1 - 36: 37: 37 1 - 37: 37: 37 1 - 37: 37: 37 1 - 38:	2096 311 2096 311 2096 317 2096 317 2096 317 2096 317 2096 317 1861 96 1861 96 1861 96 1861 96 1861 96 1861 96 1861 96 1861 96 1861 90 1862 90	1876#1788288 24558899761461 229#111118262 958#6#2176#45510 2 65555 399875222711-188861881 172# 10 28877	1933144999 1134718 92019151774 933574 933574 933574 933574 933574 933574 935774	8555 A 9999888 B 5000550855000 B 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.7.555 9.9.066 9.9.107 9.9.000 9.9.107 9.9.000 9.9.107 9.9.000 9.9.107 9.9.000 9.9.107 9.9.000 9.9.107 9.9.000 9.9.107 9.9.10	6.98 8.94 9.60	1767 1877 1873 1873 1873 1873 1873 1873 187	89316677772394077738555757366070999491216558895547909201667777239407773855557573660723116558899511665589955557573666612452911655889951166777723942216666812459941116558899511868911868911868995118689118691186891186891186911869118691186911869118691186911869118691186911868911869	77++33822556778182755-707+3333388-1-1-25551-20-19-3-2-2-3-3-2-3-3-3-3-3-3-3-3-3-3-3-3-3-	2043 3.00 2043 000 3936 10.0 1302 667 10.0 141 667 3936 10.0 141 667 3936 10.0 1916 10.0 1916 10.0 1936 10.0 1916 10.0 1936 10.0 1916 10.0

SGR NORMAL RA 18:34 DE	C -30 - 24

OBJECT NO.	×	Y	R.A.	DEC .	SAO NO.	30:24 A R.A.	DEC.	SPEC.	W MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	вс	DENSITY EXP. B DEN. VOL/ VOLUME FILTER EXP.
201 202 203 204 205 206 207 208 209 210 211	561 569 569 440 432 683 629 637 823 831 463	179 177 177 123 126 239 212 210 296 293 141	18: 3:45 18: 3:48 18: 3:49 18: 3:52 18: 4:10 18: 4:14 18: 4:15 18: 4:16 18: 4:16	-29: 3:26 -29: 4:50 -29: 4:50 -26: 6:55 -26: 5:59 -31:47: 7 -30:40:22 -30:41:45 -35: 1:39 -35: 2:27 -26:41:38	185288/ 186287/ 186288/ NO NO 209733 209733 209746 209746 186310	0: 0 0:11 0: 4 0: 1 0: 6 -0:18 -0:17 -0:12	1:26 -2:16 0:2	89 89 89 89 88 88	7.90 8.10 7.90 8.89 8.89 8.66 8.66	.00 .00 .00 .00	69 174 174 159 65 129 56 128 49 116	18 61 61 53 15 7 9 30 7	23 43 43 45 95 24 43 43 43 44 44 44	560 3.0C 186.667 3260 10.0C 326.000 3260 10.0C 326.000 2710 10.0C 271.000 465 3.0C 155.000 243 3.0C 155.000 199? 1.0L 199.000 1363 10.0C 136.300 160 3.0C 53.333 1665 10.0C 166.500
213 213 215 215 216 217 218 221 221 222 223 223 225	394 415 304 595 295 286 286 798 889 479 479 406 487	109 120 71 195 68 70 291 324 154 161 288 158	18: 4:19 18: 4:27 18: 4:43 18: 4:44 18: 4:46 18: 4:46 18: 4:47 18: 4:50 18: 4:50 18: 4:51	-25: 6:31 -25: 35:23 -23: 35:53 -29: 35:20 -22: 52: 38 -22: 50: 11 -24: 50: 11 -34: 32: 2 -36: 20: 13 -7: 7: 21 -7: 17: 7 -34: 31: 41 -7: 18: 30	186306 186315 186324 NO 186325/ 186325/ 186325/ 209755 186327 186331 209755 186331	-0: 3 -0: 4 -0: 7 0: 4 0: 6 -0: 2 -0: 17 -0: 3 -0: 7	0:11 0:40 2:52 1:39 0:36 4:6 3:3 -0:55 -0:30 0:42 2:14	8 89 89 82 83 84 80 80 89 88 89	8.40 8.50 9.10 8.50 9.10 8.50 9.00 9.30 8.60 8.60	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	89 113 112 73 141 166 66 48 92 81 53 124 122	23 25 8 10 8 31 6 31 5 5 9	51 50? 41 53? 53? 23 23 24 37 42 44 45	664 10.0C 66.400 976 10.0C 38.600 260 10.0C 26.000 598 10.0C 58.800 992 3.0C 327.333 992 3.0C 327.333 133 L 3.0C 44.333 1222 H 10.0C 51.800 518 10.0C 51.800 518 10.0C 51.800 132 3.0C 44.000 518 10.0C 266.800 1157 10.0C 115.700
226 227 228 229 230 231 232 233 234 235	402 394 657 465 446 450 899 893 401 644	121 124 230 157 159 161 348 341 141 237	18: 4:57 18: 5: 1 18: 5:28 18: 5:34 18: 5:38 18: 5:39 18: 5:44 18: 5:44	-25:21:54 -25:21:1 -31:15:6 -26:51:59 -26:29:47 -26:34:21 -36:40:11 -36:39:55 -25:27:36	196332 196332 209767? 186345 209779 209779 186350 209767?	-0: 5 -0: 1 -0:29 -0:13	0:28 0:26 0:20 0:32 0:44 0:59 1:18 5:10	82 89 85 80 80 80 88	8.50 8.50 9.38 9.00 6.58 6.58 6.27 9.38	00.00 95.8 00.00 00.00 00.00	127 54 70 75 131 143 180 223 180 59	51 10 12 9 15 64 82 38 9	96 96 98 98 98 98	2133 L 10.0C 213.300 250 L 3.0C 83.333 281 L 10.0C 28.100 247 L 10.0C 263.000 499? 1.0L 263.000 499? 1.0L 3032.000 6267 3.0C 2089.000 1743 1.0L 1743.000 257 3.0C 89.667
236 237 239 242 244 245 245 245	644 404 902 771 779 396 313 652 652 329 337	237 132 339 290 287 135 92 235 235 109 107	18: 5:44 18: 5:46 18: 5:48 18: 5:49 18: 5:49 18: 5:49 18: 6: 5:	-31:10:15 -25:28:44 -36:42:15 -34:1:56 -34:2:44 -25:27:51 -23:24:58 -31:11:36 -23:59:36	209771 186350 209779 209777 209777 186350 186360 2097677 209771 186366 186366	-0: 1 -0: 4 -0:15 -0: 9 -0: 1 -0:16 0: 9 0: 4 -0:11	-0: 8 0:10 -1:21 -0:54 -1:43 1:43 3:49 -1:28 1:33 0:15	80 88 88 88 89 89 80 80	7.69 6.27 6.58 9.25 9.25 6.27 9.30 9.38 7.69 7.48	.00 .00 .00 .00 .00 .00 .00	59 395 414 53 128 256 105 134 134 258 411	9 115 149 8 31 55 131 52 78 130	21 40 23 46 25 48 39 36 46	257 3.0C 85.667 13134 10.0C 1313.400 21065 10.0C 2106.500 200 3.0C 66.667 1409 10.0C 140.900 4360 3.0C 1453.333 4542 H 10.0C 454.200 2234 H 10.0C 223.400 2314 H 10.0C 223.400 2745 10.0C 2274.500 1491 10.0C 149.100
249 249 250 251 252 253 255 255 257	366 813 515 807 815 836 836 836 844	91 116 123 319 187 313 310 326 326 156 323	18: 6: 8 18: 6: 9 18: 6: 22 18: 6: 23 18: 6: 23 18: 6: 28 18: 6: 29 18: 6: 31	-22:44:6 -23:57:44 -24:41:2 -34:53:50 -28:6:44 -34:53:32 -34:53:32 -35:31:34 -35:31:34 -35:31:34	186365 186366 186374 209789 NO 209789 209789 209792/ 209797/ 186372 209792?	-0: 5 -0: 5 -0: 16 -0:15 -0:11 -0:12 -0:16 0: 5 -0: 8	3: 6 2: 8 -0:37 -1: 7 -0:49 -0:26 4: 5 -0:53 0:14 4:30	88 80 85 85 85 85 80 88 80 80 80	8.70 7.48 8.90 9.11 9.11 9.11 8.88 8.88 9.00 8.88	8.79 8.79 8.79 8.75 8.58	180 80 114 68 68 175 45 82 105	99 48 2 4 8 17 5 4 4 8 35	457 99 45 91 39 22 40 23 38 41	2142 1.0L 2142.000 605 10.0C 60.500 190 1.0.0C 19.000 546 3.0C 182.000 3024 10.0C 302.400 86 L 3.0C 28.667 570 10.0C 57.000 1350 10.0C 135.000
258 259 260 261 262 263 264 265 266 267 268	844 320 320 320 320 702 710 321 321 323 323	323 105 105 105 105 271 268 120 120 111	18: 6:31 18: 6:34 18: 6:34 18: 6:34 18: 6:36 18: 6:49 18: 6:49 18: 6:53 18: 6:53	-35:31:10 -23:39:30 -23:39:30 -23:39:30 -23:39:30 -32:34:26 -32:35:16 -23:45:11 -23:45:10 -23:45:10	209797 186379/ 186380/ 186381/ 186385/ 209791 209791 186379? 186379? 186389	-0:13 -0:10 -0:12 -0:15 -0:3 -0:3 -0:15 -0:10 -0:11	-0:29 1:57 -0:9 0:27 -2:1 -0:36 -1:26 -3:44 1:50 -3:43	88 8 8 85 88 88 85 85 85 85 85	8.88 9.10 8.70 9.40 9.50 9.14 9.14 9.10 7.64 9.10 7.64	8.58 .00 .00 .00 .00 8.90 8.90 .00	105 399 399 399 51 114 162 162 397 397	35 177 177 177 177 6 32 114 114 325 325	188812199999999999999999999999999999999	1350 10.00 135.000 18045 H 10.00 1804.500 18045 H 10.00 1804.500 18045 H 10.00 1804.500 18045 H 10.00 1804.500 148 3.00 49.333 1251 10.00 125.100 4664 H 1.01 4664.000 29492 H 10.00 2949.200
269 270 271 272 273 274 275 276 277 278 279	798 315 315 315 590 352 320 325 719 760 762	309 114 114 114 228 130 122 129 280 309 299	18: 6:56 18: 6:57 18: 6:57 18: 6:57 18: 7:18 18: 7:20 18: 7:21 18: 7:23 18: 7:25 18: 7:25	-34:34:9 -23:44:21 -23:44:21 -29:55:29 -24:27:27 -23:54:23 -23:55:20 -33:50:28 -33:49:46	209808 186379? 186389? 186389 186397 186402 186406 186406 NO 209817	-0:16 0:14 0:11 -0:7 0:1 -0:7 -0:9 -0:8	-1:11 -2:53 -4:23 2:40 -0:26 0:26 1:25 2:26	80 88 85 89 88 85 85	8.93 9.10 9.40 7.64 8.80 9.60 8.80 8.80	8.68 -00 -00 -00 -00 -00 -00	64 189 189 189 93 77 88 116 93 396 433	5 152 152 152 18 13 39 10 19 93 305	39 26 26 26 27 28 38 38 39 39	1157L 10.0C 11.500 10568 3.0C 3522.667 10568 4 3.0C 3522.667 10568 4 3.0C 3522.667 594 10.0C 37.500 1309? 3.0C 37.500 1309? 3.0C 37.500 243 L 1.0L 243.000 661 10.0C 9526.000 38188 10.0C 3818.800
280 291 282 283 284 285 286 287 288 289 289	754 688 815 316 807 586 586 696 688 785 794	303 275 329 135 332 237 237 282 295 319	18: 7:34 18: 8: 0 18: 8: 6 18: 8: 7 18: 8: 8 18: 8:15 18: 8:21 18: 8:21 18: 8:25	-33:49:27 -35:214:1 -35:2:43 -23:46:45 -35:3:36 -29:54:56 -29:54:56 -32:26:36 -32:25:40 -34:25:20 -34:37:39	209817 NO 209832 186424/ 186432/ 209833 209833 209834 209838	-0:14 -0:14 -0:12 0:8 -0:17 -0:1 -0:1 -0:6 -0:13	-0:47 -0:28 -1:21 -0:8 -2:51 -1:37 -0:49 -1:6	85 88 80 A0 A0 88 88 89 A0	6.24 6.99 6.99 8.30 8.90 8.69 9.10 8.50	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	414 69 206 134 79 79 136 61 75	132 11 57 11 20 7 7 7 31 9	24 37 38 86 23 45 45 38 25 45	14356 H 3.0C 4795.333 280 10.0C 28.000 3895 L 10.0C 385.000 3997 1.0C 395.000 704 3.0C 28.667 188 L 10.0C 18.800 189 L 10.0C 18.800 1590 10.0C 159.000 273 3.0C 91.000 161 L 10.0C 16.100 208 L 10.0C 20.800
291 292 293 294 295 296 297 298 299 300	645 907 415 762 550 698 574 767 706 582	324 263 371 173 318 227 292 243 325 289 241	18: 8:29 18: 8:30 18: 8:31 18: 8:32 18: 8:33 18: 8:34 18: 8:39 18: 8:39	-31:17: 4 -37: 3:40 -26: 2: 3 -34: 6:26 -29: 7:46 -32:40:15 -29:51:30 -34: 6: 4 -32:41:30 -29:51:37	NO 209840 186441 209841 NO 209837 186432 209841 209837 186432	-0:12 -0:10 -0:15 -0:7 0:1 -0:8	-0:25 -0:5 -1:35 -0:23 0:35 -1:12 -1:38 0:28	80 80 80 80 80 80 80 80 80	8.50 9.00 7.11 8.37 8.90 7.11 8.37 8.90	8.30 .00 .00 7.75 .00 .00 7.75	77 62 93 177 78 79 59 163 178 124	25 39 12 14 7 24 39	42 37 37 24 46 26 92 45	274 10.00 27.400 160 L 10.00 16.000 896 10.00 896.600 2507 H 3.00 835.600 499 3.00 166.333 1024 1.01 1024.000 2285 10.00 228.500 1212 H 10.00 121.200

SCR	NORMAL	PA	19.74	DEC	-30:24

NO. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	08 601	¥				9:34 DEC -			CDEC	v		DEAN	NO OF	DC.	DENCITY EVO.	DEN HOLE
100 100		•		R.A.	UEC.					MAG.				80		
398 559 301 18:13:39 -29:50:29 186576 0: 2 2:10 88 9.00 .00 134 10 90 322 1.0L 322.000	3012 3033 3043 3053 3063 3073 3083 3112 3113 3115 3117 3119 3223 323 325 326 327 328 329 3213 3213 3213 3213 3213 3213 3213	5318 5619 5619 5619 5619 5619 5619 5619 5619	239 241 241 251 251 251 251 251 251 251 251 251 25	8	-88.59 : 18 : 18 : 28 : 18 : 18 : 18 : 18 : 18	209841 186444 NO 186445 186445 186445 186445 186445 186445 186471 186471 186471 186471 186471 186471 186471 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186481 186581 186581 186581 186581 186581 186581 186591	7# 22325 0705 96 #275#027316612921809#6107633399#3123201# 1 330 8778111##935##5##5#32813715501910	1:38 1:38	80 900990 9900 00 8889999288885858098889000988890008888888888	7.6.38 8.000	9.14 99.10 000 000 000 000 000 000 000 000 000	3699 600 600 600 600 600 600 600 600 600	90 91 94 97 73 95 12 22 17 17 42 51 28 19 19 19 19 19 19 19 19 19 19 19 19 19	2393895172021116239733249336163229810413886828617313965125888433661339632187236988829183355297777349998330	VOLUME FILTER VOLUME FILTER VOLUME FILTER VOLUME V	527.333.333.67.333.330.67.333.330.67.333.333.415.300.67.67.000.67.67.67.67.67.67.67.67.67.67.67.67.67.
	400	690	349	18:13:52	-32:58:18	50 995 2	-0: 8	-0:50	88	8.32	7.90	90	15	51	536 3.0C	178.667

SGR	NORMAL	RA	19.74	DEC	-30.24

			SGR	NORMAL RA 1	3:34 DEC -	30:24								
OBJECT NO.	×	Y	R.A.	DEC.	NO.	R.A.	DEC.	SPEC. TYPE	MAG	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
012345678901123456789011234567890112345678901123455678901234555555555555666666667890112344444444444555555555555556666667877777777888884888999999999999999	698 699 699 699 699 699 699 699 699 699	346 355 369 378 378 378 378 378 378 378 378	8 13 53 9 8 13 13 13 13 13 13 13 13 13 13 13 13 13	32:57:29 32:57:29 31:18:0 33:38:49 31:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:19:10 33:18:10	209952 209952 209954 209953 209959 209951 209961 209966 209966 209966 209966 209966 209966 209966 209966 209966 209966 209970 209966 209970 209966 209970 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 186607 209970 20	87120351649198886 737 21332060191230 601 1785211 591122176818771198277062 7 310158227179988855127	-1:32 -0:04-67 -0:17 -0:18 -0:17 -0:18 -0:17 -0:18 -0:	888988888505050808888888888888888888888	8.8.32.99.7.76.870.100.100.100.000.000.000.000.000.000.0	7. 90 7. 90 9. 04 000 000 000 000 000 000 000 000 000	180 1177 1055 218 343 3362 416 416 416 416 416 416 416 416 416 417 416 416 416 416 416 416 416 416 416 416	255184566224422251148664761884772431112152605661209922478112188555228841188855555167169881221555314885522188133399776686	39361661999666221188826666111771172659216663339343337152433332183335144444444222444444446533332283333887733574434422224444444622333322833328877335744344444444444444444444444444444	1973 10.00 197.300 118.000 149.100 768.667 10.101 10.00 381.500 119.000 549.400 54

			SGR	NORMAL RA 1	9:34 DEC -	30:24								
OBJECT NO.	×	Y	R.A.	D€C.	SAO NO.	R.A.	δ€C.	SPEC	AAG.	MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. DEN. VOL./
012345678990112345678990112345667557577899011234566755955955955995599559995599955999559	3880 4100 8457 5599 9881 987 7552 998 405 405 405 405 405 405 7357 7357 7357 7357 7357 7357 7357 73	298 3304 4 4 5 7 5 8 4 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8 9 10 18 19 18 18	26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 25: 38 26: 26: 25: 38 27: 28 28: 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28: 28 28: 28:	186726 186730 / 186730 / 186730 / 186730 / 186730 / 186730 / 186748 186748 186748 186748 186748 186749 186749 / 186750 / 186760 / 186760 / 186760 / 186780 1		1:14 1:13 1:13 1:13 1:15	8 8 A A A B B B B B B B B B B B B B B B	7. 99 8.80 5.39 9.8.52 8.8.52 9.8.80 8.8.80 9.9.00 10.6.95 7.7.84 9.00 10.6.95 7.8.50 8.8.80 8.80 8	8.98 8.20 9.00 0.00 0.00 0.00 0.00 0.00 0.00 0	228 1111 76 288 379 416 123 133 146 113 176 161 113 176 161 161 177 179 189 189 189 189 189 189 189 189 189 18	52 13 3 16 50 52 51 12 8 10 4 3 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	343344333673316733456143328888825555522221333512335123351333382223919223341203323382227333323122233323232323232323232323232	3688 10.0C 368.800 393 310.000 393 310.000 393 300.003 393 393 300.003 393

NRL REPORT 8173

SGR NORMAL RA 18:34 DEC -30:2	SGR	NORMAL	RA	18:	34	DEC	-30:24
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OBJECT	×	Y	R.A.	D€C.	SAO NO.	R.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. & VOLUME FILTER	DEN. VOL/ EXP.
012345678901123456789011234567890112334567899012345678990123456678990	696366614513226755669977758884473999966677758884473999999999999999999999999999999999	4919919919919919919919919919919919919919	18 26:15 18 26:15 18 26:15 18 26:16 18 26:16 18 26:16 18 26:16 18 26:26 18 26:26 18 26:26 18 26:26 18 26:26 18 26:26 18 26:38 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 26:55 18 27:55 18	33: 59: 59 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 47 33: 57: 57 33: 57 33:	210226 10226 10226 10226 10236 10236 10237 1	# ### 2055664647741044014#############################	0:170 -0:377 -0:349 -0:213 -0:	9 990 990909030309299995559989228383848889888888888888888888888888	7. 1.10.90 3.00.27.8.1.69.2.90.00.10.8.8.8.9.7.9.8.8.8.8.9.9.9.2.9.8.8.8.8.9.9.9.9.8.8.8.8	000 000 000 000 000 000 000 000 000 00	141 141 141 141 141 141 141 141	17571165459990001179569454381194466118911145991118000454455568871118992556456024185765887166	839251833982003449003338841699904787123223881100033302222226666533777753337773333222244111993336253322337263177 20122332338822234429000416999388322222222222222222222222222222222	198	619, 000 426, 687 429, 333 558, 300 57, 200 114, 300 57, 200 114, 200 57, 200

	SGR	NORMAL RA I	8:34 DEC -	30:24								
OBJECT X	Y R.A.	D€C.	SAO NO.	A.A.	DEC.	SPEC	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EZP. & DEN. ZOLZ ZOLUME FILTER EXP.
702 801 6 703 801 6 704 190 4 705 195 4 706 198 4 707 809 6 709 809 6 709 507 5 710 839 6 711 831 6 712 515 5	70 18:35:13 22 18:35:23 22 18:35:23 23 18:35:29 29 18:35:30 20 18:35:30 20 18:35:30 20 18:35:30 32 18:35:34 47 18:35:44	-34: 3:41 -37: 3:16 -37: 3:16 -23:34:40 -23:35:15 -37: 3:52 -37: 3:52 -37: 3:52 -37: 3:52 -37: 43:24 -30:34:39 -32: 1:17	210392 210388/ 210394/ 187080 187080 187080 2103887 210394 210403 210397 210397 210403 NO	-0: 1 0: 15 0: 0 0: 2 0: 22 0: 12 -0: 6 0: 7 0: 9	-1: 7 -2: 2 -0: 32 -0: 48 -2: 18 -2: 39 -1: 8 -0: 6 0: 1 -1: 21	89 45 88 89 89 89 45 88 88 88	8.55 9.59 9.02 5.75 5.75 9.59 9.02 7.62 8.92 7.62	8.07 9.74 8.65 .00 .00 9.74 8.65 .00 8.49	109 51 51 310 243 399 109 66 183 68 144	23 66 69 48 132 13 13 13 21 21 22 22	31 21 24 73 36 34 19 35 21 27	998 10.00 99.800 155 3.00 51.667 155 3.00 51.667 6208 3.00 2069.333 3130 1.01 3130.000 15916 10.00 1591.650 567 10.00 56.700 301 1 3.00 102.333 3285 H 10.00 328.650 652 4 3.00 210.667 1730 1 10.00 173.000 801 10.00 80.100
715 670 5 716 678 5 717 591 5 718 408 4 719 599 5 720 121 4 721 459 5 722 451 5 723 144 4 724 935 6 725 152 4 726 314 4 727 481 5	50 18:35:45 3 18:35:55 80 18:35:56 80 18:35:56 80 18:36:4 90 18:36:9 90 18:36:36 90 18:36:36 90 18:36:36 90 18:37:16 90 18:37:15 90 18:37:16 90 18:37:16	-32: 0:57 -34:12:51 -34:13: 9 -32:28:51 -38:29:33 -22: 1:45 -29:24:14 -29:23:56 -22:44:19 -26:14:19 -26:14:4	NO 210408 210408 210409 187089 210409 187096 187100 187110 187112 210450 187112	-0: 4 -0: 5 0: 4 -0: 5 -0: 2 -0: 2 -0: 5 -0: 5	-0: 9 -0:26 -0:35 -1:16 -1:17 -1: 4 -1: 6 -0:48 -1:10 -6:40 -1:41	A0 89 89 89 A0 8 85 A2 85	6.64 9.05 7.46 9.05 8.20 9.50 9.50 8.90 8.90	00 00 8 63 00 8 63 00 00 00 00 00	40 80 170 45 68 91 66 123 58 58 72 128 106 78	12 38 13 22 10 30 11 13 24 47	18 20 31 19 28 31 28 18 20 37 31 31 26	85 3.0C 28.333 w1 L 3.0C 177.000 229 L 10.0C 22900 93 3.0C 37.500 93 1.00C 37.500 93 1.00C 37.500 93 1.00C 37.500 93 1.00C 50.00 14-0 10.0C 50.00 311 3.0C 103.667 373 3.0C 103.667 373 3.0C 28.333 6-9 10.0C 6-900 2362 10.0C 356.700 563 10.0C 56.500
729 525 5 730 533 57 731 431 5 732 428 5 733 428 5 733 428 5 735 624 5 735 634 5 736 359 5 737 586 5 740 588 5 741 580 5 742 455 5 743 463 7 744 166 44 745 996 7	99 18: 37: 48 57: 99 18: 37: 48 57: 99 18: 37: 49 99 18: 38: 99 99 18: 38: 99 18: 38: 98: 13 98: 98: 18: 98: 13 98: 98: 18: 98: 13 98: 98: 18: 98: 13 98: 98: 98: 98: 98 99: 98: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 53 99: 98: 98: 98: 53 99: 98: 98: 98: 98: 98: 98: 98: 98: 98:	-21:33:5 -31:8:23 -31:9:3 -28:53:38 -28:53:22 -28:52:35 -33:21:26 -27:30:20 -27:30:20 -32:26:2 -32:26:2 -32:26:3 -32:36:3 -32:36:3 -32:36:3 -32:36:3 -32:36:3 -32:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:3 -33:36:36:3 -33:36:36:3 -33:36:36:3 -33:36:36:3 -33:36:36:3 -33:36:36:3 -33:36:36:3 -33:36:36:36:3 -33:36:36:36:3 -33:36:36:36:3 -33:36:36:36:3 -33:36:36:36:36:3 -33:36:36:36:36:3 -33:36:36:36:36:3 -33:36:36:36:36:36:3 -33:36:36:36:36:36:3 -33:36:36:36:36:36:36:36:36:36:36:36:36:3	187119 210457 210457 187128 187128 187128 210464 210464 210464 187141 187141 187141 187141 187141 187151 187151 187151 187151 187154 210488 210488 210488	-0: 4 -0: 3 -0: 1 0: 2 -0: 1 -0: 1 -0: 1 0: 5 -0: 3 -0: 3	-0:33 -1:52 -1:13 -0:57 -0:90 -0:38 -0:54 -1:46 -0:43 -0:54 -0:54 -0:54 -0:28 -0:56 -0:28	89 88 88 88 89 85 85 88 88 89 89 80 80 80 80 80 80 80 80 80 80 80 80 80	8.80 8.82 7.90 7.90 7.90 7.90 7.90 7.90 7.90 8.30 8.30 8.30 7.76 7.76 7.76 9.00 9.00 9.00 9.00 9.60	00 8 50 8 50 00 00 00 00 00 00 00 00 00 00 00 00	76 51 109 83 115 66 152 77 171 176 309 152 50 107 54 131 67	30 55 44 16 7 10 34 16 77 30 55 44 55	30 19 27 28 20 77 19 30 21 33 79 80 29 21 19 27 31 23 33	9% 6 L 10.0 C 9% 600 127 3.0 C 42.333 10.7 10.0 C 10% 700 278 1.0 C 203.657 208 1.0 C 206.000 3% 2 3.0 C 11% 000 186 000 186 000 186 000 196 10.0 C 25% 600 176 L 10.0 C 25% 600 1776 H 3.0 C 25% 657 666 1 10.0 C 25% 667 666 1 10.0 C 25% 667 661 600 10.0 C 25% 667 61 600 10.0 C 25% 667 600 10.0 C 25% 667 61 600 10.0 C 25% 600 10.0 C 25% 667 61 600 10.0 C 25%
747 496 5 748 901 7 749 904 7 750 372 5 751 364 5 752 364 5 753 847 6 753 847 6 755 727 66 756 721 6 757 728 6 758 557 6 759 957 6 750 910 7 751 918 7	56 18:39:44 18:39:44 50 18:39:49 30 18:39:51 55 18:40:23 34 18:40:33 34 18:40:33 36 18:40:33 37 18:40:33 38 18:40:33 39 18:40:33 30 18:40:33	-30:27:32 -39:20:49 -39:21:52 -27:42:41 -27:42:28 -22:28:2 -38:22:33 -35:40:11 -31:55:40 -35:40:11 -31:55:40 -39:46:50 -25:5:8	NO 21r+88 210488 197170 187170 187175 210501 210501 210509 210509 210509 210523 210526/ NO NO	0:18 0:20 0:22 0:5 0:4 0:11 0:12 0:4 0:7 -0:3	-0:41 -0:49 -0:34 -0:22 -0:9 -1:26 0:33 1:25 0:42 -1:29	88 89 89 89 89 80 80 83 83 85 89	7.09 7.09 8.40 7.60 5.13 5.13 4.82 4.82 4.82 9.55 9.70	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	50 120 384 104 53 72 61 178 423 445 452 59 65 197 254	131 24 6 21 15 57 264 535 7 30 91	25 38 33 20 31 22 35 82 23 40 29 29 29 29 29 29 29 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	93 10.0C 9.300 1266 1.0L 1266.000 15-99 H 10.0C 15-9-9.00 1012 10.0C 15-9.900 1012 10.0C 15-9.900 1012 10.0C 53.333 625 10.0C 62.500 451 1.0.0C 150.333 344.7 10.0C 344.700 2054.9 1.0.0C 910.667 81361 10.0C 8136.100 183 10.0C 18.300 183 10.0C 18.300 183 10.0C 18.300 184 10.0C 602.300 4363 3.0C 297.667 6023 10.0C 602.300
763 242 5; 764 392 5; 765 245 5; 766 386 5; 767 407 5; 769 895 7; 770 415 5; 771 415 5; 772 333 5;	21 18:41:52 60 18:41:53 18:41:54 61 18:42:9 76 18:42:26 76 18:42:26 78 18:42:31 74 18:42:31	-25: 4:18 -28:17:38 -25: 4:26 -28:10:46 -28:51:11 -29:51:11 -39:21: 5 -28:50:33 -28:50:33 -27: 2:55 -27: 3:57	187216 187225 187216 1872257 187237/ 187238/ NO 187237/ 187238/ 187239 187239	0: 7 -0: 7 0: 9 -0: 4 -0: 5 0: 1 -0: 5 0: 6	-0:31 -1:15 -0:39 5:37 -1:22 -2:16 -0:43 -1:37 -0:16 -1:19	88 89 89 89 80 A0 A0 88 88	5.76 8.10 5.76 8.10 8.40 8.90 8.90 3.30 3.30	.00	215 75 380 87 60 64 128 128 452 453	36 6 110 29 10 10 12 30 30 509 277	72 34 38 35 20 20 38 30 30 35? 25	207 1.0L 2207.000 1998 L 10.0C 18.800 11998 1L 0C 1199.800 968 L 10.0C 96.800 296 3.0C 98.667 271 10.0C 27.100 1554 10.0C 155.400 1554 10.0C 7857.900 32202 3.0C 7857.900 32202 3.0C 7857.900
774 331 51 775 368 51 776 465 61 777 457 61 778 462 6 779 173 5 780 109 4 781 809 7 782 123 4 783 806 7 784 800 7 785 585 66 786 378 5 787 386 5 787 386 5 787 386 5 787 387 5 789 327 5 790 599 6 791 322 5 792 5 792 5 793 5 794 5 794 5 794 5 795 6 796 904 7 796 904 7 797 6 798 321 5 799 321 5	59 18:42:39 54 18:42:55 52 18:43:40 55 18:43:42 11 18:43:43 13 18:43:56	-27:50:12 -27:50:12 -30: 2:14 -30: 1:24 -30: 1:24 -30: 1:28 -23: 42:53 -23: 26: 26 -27: 36: 58 -37: 36: 92 -32: 43: 33 -28: 21: 3 -28: 21: 3 -27: 9: 13 -31: 55: 58 -39: 41: 53 -31: 55: 58 -33: 16: 33 -33: 16: 3	187249 187249 210563 210563 210563 187276 210570 187270 210570 210570 210570 210570 210570 210570 187290 187290 187290 187290 187290 10568 210568 210568 210568 210568 210568 210568 210568 210568 210568 210568 210561 320613	0:77.432.8137.00:10.3	-0:31 -0:33 -1:33 -1:33 -0:36 -2:10 -0:51 -0:51 -0:51 -0:51 -0:50 -0	889333098888888888888888888888888888888	3.30 9.73 9.73 9.73 8.90 8.595 6.95 6.95 7.24 7.25 8.50 8.50 8.50 8.50 8.50 8.50 8.50 8.5	8.94 90 000 000 000 000 000 000 000 000 000	410 700 703 64 114 603 338 67 110 116 63 54 94 71 162 71 148 297 71 152 70 98 95	179 1236 111 7 8 80 80 166 166 166 167 178 189 21 111 124 70 21 36 109 109 109 109 109 109 109 109 109 109	82 348 198 380 373 211 380 500 226 213 378 220 339 330 330 331 339 330 330 330 330 330 330 330 330 330	15152 1.00 15152.000 1336 1.00 192.400 1359 3.0C 119.657 196 1.0.0C 19.9.900 199 1.0.0C 19.9.900 199 1.0.0C 19.9.900 1525 1.0.0C 52.500 8558 H 10.0C 835.800 443 1.0.0C 444.300 448 1.0.0C 44.300 448 1.0.0C 21.400 222 1.3.0C 79.000 102 1.0.0C 79.000 102 1.0.0C 79.000 102 1.0.0C 200.700 102 1.0.0C 200.700 102 1.0.0C 200.700 102 1.0.0C 200.700 102 1.0.0C 303.33 377 3.0C 125.667 1396 3.0C 462.000 6110 H 10.0C 611.000 923 H 1.0 C 923.000 1185 3.0C 395.000 8498 H 1.0 C 93.400 9394 1.0 C 93.400 9377 10.0C 97.700 943 1.0.0C 97.700

SGR	NORMAL	RA	18	34	DEC	-30:24

OBJECT NO.	×	Y	R.A.	DEC.	5A0 NO.	Δ R.A.	Δ DEC.	SPEC .	V MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXF.
01234567899011234567899012234567899012334567899012345678990123456678990123345678990123345678990123345678999999999999999999999999999999999999	578 - 655 -	55669970730756690144255636604476656787878878777777864866666777777788888888	18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -93 18 +61 -13 18 +6	24.36.46 32.45.36 32.45.36 33.48.39 30.48.39 30.48.39 30.48.39 30.48.39 30.48.39 30.48.39 30.48.39 30.48.39 30.48.39 31.11.11.16 24.49.19 25.11.11.16 24.49.19 25.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.11.16 26.11.1	187317 210625 210663 210663 210663 210663 210663 210663 210663 210663 210663 210663 210663 210670 210704 210705 210707 210706 210772 210706 2107072 210706 2107072	0: 7	-0.255-0.51694-0.255-0.51694-0.255-0	A 8998888099339800008889393389988995955 99999999999999999999	8. 7.7.6.6.6.6.7.8.8.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9	.00 .00 .00 .00 .00 .00 .00 .00 .00 .00	562 733 186 189 9 52 18 18 18 18 18 18 18 18 18 18 18 18 18	5 + 129 57 17 7 20 41 167 28 97 23 1 1 87 28 97 23 1 1 1 1 2 97 23 1 1 5 4 2 9 4 88 97 23 1 1 88 2 1 1 88 2 2 1 1 88 2 2 1 1 1 2 1 2	490133426129933365091685894590879061577668554881118886603925502888902285977333388663421923211802321186626257766262548824188886033223428889022859773333886634223423444477666262548844444776662627762776277777666262776277627762776277627762776277627762776277662776277627762776776	111

147

SGR	NORMAL	RA	18:	34	DEC	-30:24

OBJECT NO.	×	Y	R.A.	DEC.	SAO NO.	R.A.	DEC.	SPEC.	MAG.	MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. & VOLUME FILTER	
901	450	848	19: 5:19	-31:21:32	210970?	0:17	4: 9	AO	.00	.00	47	4	55	97 3.00	32.333
905	450	848	19: 5:19	-31:21:32	210977	-0:5	5:15	89	8.73	8.30	47	4	55	97 L 3.0C	32.333
903	135	763	19: 5:24	-24:39:37	187718	0:12	4:36	89	6.24	- 00	81	36	51	1595 3.00	430.667
904	140	769	19: 5:25	-24:38:53	187718?	0:14	5:20	89	6.24	-00	84	8	60	175 L 1.0L	175.000
905	144	761	19: 5:26	-24:39:33	187718	0:15	4:40	89	6.24	.00	184	94	30	5989 10.00	598.900
906	425	843	19: 5:48	-30:40:15	210987	-0:8	5: 9	AO	7.89	.00	73	12	41	309 L 10.0C	30.900
907	154	774	19: 5:51	-25: 5:36	187728	0:8	3:60	89	6.76	.00	85	39	50	1424 3.00	474:667
908	162	772	19: 5:55	-25: 4:19 -25: 3:59	187728?	0:12	5:16	89	6.76	.00	196	97 16	31	6463 10.0C	646.300
910	221	792	19: 5:59	-26:20:43	18/168	0:16	5:36	89	6.76	.00	91 79	8	60		422 3000
911	475	866	19: 6:11	-31:59:14	211001	-0:18	0:54	85	9.52	8.91	52	9	55	2497 10.0C 223 3.0C	74.333
915	483	864	19: 6:18	-31:58: 5	211001	-0:18	2: 3	85	9.52	8.91	146	41	43	2138 10.00	213.800
913	611	898	19: 6:45	-34:47: 1	210998?	0:23	-1:11	AO	8.30	7.89	72	9	45	214 L 10.0C	21.400
914	672	950	19: 6:46	-36:18:25	210996	0:30	-3:39	89	6.58	.00	72	28	23	951 3.00	317.000
915	681	917	19: 6:47	-36:18: 9	210996?	0:31	-3:24	89	6.58	.00	268	94	46	7460 10.0C	746.000
916	365	853	19: 7:59	-29:32:27	187786	-0:10	2:41	89	6.25	.00	388	108	42	13014 10.0C	1301.400
917	361	862	19: 8: 0	-29:32: 2	187786	-0: 9	3: 5	89	6.25	.00	138	34	69	1369 1.0L	1369.000
918	357	856	19: 7:60	-29:32:44	187786	-0: 9	2:23	89	6.25	.00	178	54	23	3303 3.0C	1101.000
919	195	806	19: 8: 1	-25:55:14	187776	0: 9	4:25	89	8.50	.00	65	18	32	484 L 10.00	48.400
920	238	855	19: 8:20	-26:51:27	NO						67	6	33	155 10.0C	15.500
921	535	834	19: 8:41	-26:49:38	NO						116	36	63	1269 1.0L	1269.000
925	662	944	19: 9:46	-36: 4:53	211039?	0:47	-3:20	85	10.20	9.62	89	41	47	1246 10.00	124.600
923	662	944	19: 9:46	-36: 4:53	211043?	0:30	9:43	5A	8.95	8.87	89	41	47	1246 H 10.00	124.600
924	554	923	19: 9:48	-33:55:58	211045/	0:51	0:15	AO	7.86	.00	135	50	24	2645 3.00	881.667
925	554	923	19: 9:48	-33:55:58	211046/	0:50	-0: 6	AO.	7.30	. 00	135	50	24	2645 3.0C	881.667
326	365	874	19: 9:52	-29:41: 9	187830	-0:5	2:13	89	8.10	.00	90	27	43	836 L 10.00	83.600
927	563	920	19: 9:53	-33:57:10	211045/	0:56	-0:57	AO	7.86	.00	388	113	49	13173 H 10.0C	1317.300
928	563	950	19: 9:53	-33:57:10	211046/	0:25	-1:18	A O	7.30	.00	388	113	49	13173 H 10.0C	1317.300
929	559	930	19: 9:54	-33:55:28	211045/	0:56	0:45	AO.	7.86	.00	123	33	73	1105 1.0F	1102.000
930	559	930	19: 9:54	-33:55:28	211046/	0:56	0:24	A0	7.30	.00	153	33	73	1102 1.0L	1102.000
931	320	881	19:11:28	-28:50:58	187864	0:0	1: 0	88	9.20	.00	75	15	40	396 L 10.00	39.600
932	427	910	19:11:48	-31: 9:30 -34:56:37	211085	0:15	0:47	AO	8.94	8.47	66 53	13	25	311 3.0C	9.200
933	592	963	19:12:38	-34:56:37	NO NO						163	76	49?	4119 10.0C	411.900
934	532	960 953	19:12:52	-33:39:15	211100/	15:0	-2: 7	AO	7.38	.00	89	43	53	1675 3.0C	558.333
936	532	953	19:12:52	-33:39:15	211101/	0:18	0:53	88	9.03	8.38	89	43	23	1675 3.0C	558.333
937	536	960	19:12:57	-33:38:45	211100/	0:18	-1:38	AO.	7.38	.00	105	50	78	469 1.0L	469.000
938	536	960	19:12:57	-33:38:45	211101/	0:24	1:22	88	9.03	8.38	105	50	78	469 1.0L	469.000
939	541	950	19:12:57	-33:40:23	211100/	0:56	-3:16	AO	7.38	.00	338	116	49	11211 H 10.0C	1121.100
940	541	950	19:12:57	-33:40:23	211101/	0:23	-0:16	88	9.03	8.38	338	116	49	11211 H 10.0C	1121.100
941	590	967	19:13:47	-34:33:53	2111107	0:46	-1:48	AO	8.98	8.58	78	17	497	420 L 10.0C	42.000
942	505	976	19:15:25	-33:15:48	211148	0:19	-1:10	88	7.52	.00	90	43	27	1560 3.0C	520.000
943	509	983	19:15:30	-33:15:20	211148	0:24	-0:42	88	7.52	.00	100	22?	70	742 1.0L	742.000
344	514	973	19:15:31	-33:15:41	2111487	0:25	-1: 3	88	7.52	.00	306	117	49	10020 H 10.0C	1002.000

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SGR	OVER	OF XP	RA	18	74	DEC	-30.24	

SOR OVEREXP RA 18:34 DEC -30:24		
OBJECT X Y R.A. DEC. SAO	F BG DEN S VOL	UME FILTER EXP.
101 588 98 17:57:36 -28:43:31 186085 0:3 -0:54 A0 8.90 .00 249 175 102 543 80 17:57:43 -27:41:52 186082 0:20 1:25 89 9.00 .00 189 30 103 696 170 17:57:47 -31:25:20	108 1	569 H 30.00 352.300 5437 30.00 51.433 2047 3.0L 401.333
104 918 272 17:57:53 -36:22: 4 209597 -0: 6 1:14 89 8.90 8.46 422 119 105 918 272 17:57:53 -36:22: 4 209608? -0:32 0:36 89 6.32 .00 422 119 106 557 88 17:57:54 -28: 1:49 186:20? -0:40 -4:26 89 9.30 .00 149 5	327 6 327 6	5435 H 3.0L 2145.000 5435 3.0L 2145.000 1107L 30.0C 3.667
107 532 79 17:57:56 -27:28:14 108 864 228 17:58:5 -34:59:49 209605 -0:9 0:44 A0 8.50 8.30 132 44 109 761 181 17:58:8 -32:42:18 209599/ 0:5 1:49 A0 8.90 8.69 140 73	97 1	187? 30.00 6.233 224 30.00 40.800 292 30.00 76.400
110 761 191 17:59: 8 -32:42:18 209609/ -0:18 0:37 0 8.76 8.77 140 73 111 587 127 17:58: 9 -28:58: 3 186102 0: 3 1:35 40 9.10 .00 422 6 112 885 261 17:58:12 -35:40:41 209614 -0:31 -0:29 88 7.62 7.33 388 30	396	292 L 30.0C 76.400 1387L 3.0L 46.000 124 L 3.0L 374.667
113 599 110 17:58:14 -29: 1:57 186102 0: 9 -2:19 A0 9.10 .00 179 33 114 925 258 17:58:15 -36:21:29 209597/ 0:17 1:48 B5 8.90 8.46 382 201 115 925 258 17:58:15 -36:21:29 209608/ -0:10 1:10 89 6.32 .00 382 201	95 22 95 22	002 30.00 33.400 522 30.00 750.753 522 30.00 750.733
116 613 140 17:58:20 -29:34:19 186109 0: 5 0:56 A0 7.50 .00 431 16 117 522 103 17:58:22 -27:29:53 NO 440 51 118 622 123 17:58:25 -29:35:24 186109 0:10 -0: 9 A0 7.50 .00 198 89 119 543 112 17:58:26 -28: 0: 2 186109 -0: 7 -2:39 89 9.30 .00 441 19	395 1 114 3	357 L 3.0L 119.000 744 3.0L 581 333 971 30.0C 132.367 510 3.0L 170.000
120 892 246 17:58:32 -27:57:16 186120 -0:15 0:33 89 7.62 7.33 254 486 121 550 94 17:58:32 -27:57:16 186120 -0:1 0: 7 89 9.30 .00 162 46 122 891 263 17:58:33 -35:37:6 209614 -0:11 3: 6 89 7.62 7.33 367 7	93 34	516 30.0C 1153.633 516 30.0C 50.533 189?L 3.0L 63.000
123 881 263 17:58:33 -35:37:6 209620? -0:18 -4:36 A2 9.46 9.23 367 7 124 730 172 17:58:33 -32:3:52 209617 -0:14 -0:24 88 8.61 8.38 149 133 125 481 89 17:58:37 -26:33:10 186:36 -0:20 -4:10 A0 9.00 .00 419 25	335 96 4	189? 3.0L 63.000 617 30.0C 153.900 599?L 3.0L 199.667
126 521 107 17:58:43 -27:31:47 NO 456 309 127 824 217 17:58:45 -34:10:46 209626 -0:19 0:40 88 8.93 8.60 146 65 128 719 192 17:58:46 -32:31:13 209617 -0:1 0:15 88 8.61 8.38 420 22	392 7 104 1 383	772 3.0L 2590.667 733 30.0C 57.767 598 L 3.0L 199.333
129 529 89 17:58:52 -27:30:39 NO 371 308 80 267 17:58:55 -35:39: 4 2096!4 0:12 1: 8 88 7.62 7:33 356 15 131 880 267 17:58:55 -35:39: 4 2096!3? -0: 1 -4:43 A 9.97 9.60 356 15	334? 334?	356 30.0C 911.867 3377L 3.0L 112.333 3377L 3.0L 112.333 351 30.0C 11.700
132 537 93 17:58:55 -27:41:46 NO 163 10 163 10 133 469 88 17:58:59 -26:18:51 NO 163 10 427 26 134 605 123 17:59:2 -29:15:45 166:28 0:23 -0:20 A0 9.00 .00 173 46 135 473 70 17:59:8 -26:18:51 186:147 -0:17 -7: 0 A0 9.00 .00 174 10	386 106 1	351 30.0C 11.700 903 3.0L 301.000 871 30.0C 62.367 417 L 30.0C 13.900
136 800 233 17:59:11 -33:53:51 209631 -0:13 -0:26 85 7.55 6.98 450 143 137 679 158 17:59:17 -30:58:44 209635 -0:16 -0:28 89 8.63 8.32 131 15 138 808 217 17:59:19 -33:53:33 209631 -0:5 -0:8 87 7.55 6.98 380 259	357 7 102	1425 3.0L 2475.000 3727L 30.0C 12.400 1496 30.0C 1016.533
139 876 271 17:59:27 -35:36:28 2096237 0:31 -2: 6 A 9.97 9.60 371 19 140 876 271 17:59:27 -35:36:28 2096347 -0: 4 -4:36 89 9.06 8.84 371 19 141 876 271 17:59:27 -35:36:28 209639 -0:25 0:27 89 8.30 8.02 371 19	331 331 331	569 H 3.0L 189.667 569 3.0L 189.667 569 3.0L 189.667
142 753 216 17:59:28 -32:53: 7 400 596 143 656 173 17:59:30 -30:41:44 209636 -0:14 1:55 A0 9.61 9.33 417 21 144 607 131 17:59:32 -29:22:34 186156 -0:4 -0:29 88 7.86 .00 356 272	381 104 27	339? 3.0L 3113.000 557? 3.0L 185.667 293 H 30.0C 909.767
145 598 150 17:59:38 -29:22:26 186156 0: 2 -0:21 88 7.86 .00 459 129 146 799 239 17:59:39 -33:56:18 209631 0:15 -2:52 85 7.55 6.98 330 5 147 472 76 17:59:41 -26:15:29 186147? 0:16 -8:38 A0 9.00 .00 249 73 148 472 76 17:59:41 -26:15:29 1861807 -0:36 3:49 A0 7.50 .00 249 73	357 130? 4	348 3.0L 1449.333 139?L 3.0L 46.333 080 H 30.0C 136.000 080 30.0C 136.000
149 632 146 17:59:57 -29:59:38 NO 150 463 99 17:59:59 -26:17:44 186:80 -0:18 1:33 A0 7.50 .00 431 18 151 504 116 18:0:0 -27:15:53 186:68 0:1 3:54 A2 9.00 .00 401 7	102 1 395	007 30.0C 33.567 484?L 3.0L 161.333 320? 3.0L 106.667
152 543 133 18: 0: 8 -28:10:40 153 C11 140 18: 0:11 -29:31:28 186166/ 0:14 0:24 85 8.90 .00 206 66 154 611 140 18: 0:11 -29:31:28 186170/ 0: 9 -3:29 A0 9.10 .00 206 66	99 3 99 3	632? 3.0L 544.000 694 L 30.0C 123.133 694 30.0C 123.133
155 494 92 18: 0:12 -26:50:40 186149 -0:21 1:38 85 7.90 .00 207 105 155 528 129 18: 0:14 -27:50:56 186171 0:12 0:59 A0 9.00 .00 436 89 157 502 118 18: 0:15 -27:14:30 1861687 0:16 5:17 A2 9.00 .00 404 35 158 502 118 18: 0:15 -27:14:30 1862007 -0:28 3:54 83 9.00 .00 404 35	388 2 357 1	670 30.00 189.000 3642H 3.0L 788.000 315 H 3.0L 438.333 315 L 3.0L 438.333
158 502 118 18: 0:15 -27:14:30 1662027 -0:28 3:59 83 9.00 .00 404 35 159 538 111 18: 0:17 -27:53:14 186171 0:14 -1:19 40 9.00 .00 180 52 160 858 251 18: 0:17 -35: 6: 1 2096407 0:25 -7:55 A2 9.18 9.23 134 69 161 858 251 18: 0:17 -35: 6: 1 2096637 -0:41 0:33 40 8.5 8.00 134 69	133 1	315 L 3.0L 438.333 367 30.0C 45.567 218 30.0C 73.933 218 30.0C 73.933
162 524 130 18: 0:28 -27:46:46 186201 -0:16 -2:48 A0 9.20 .00 442 72 163 565 147 18: 0:32 -28:43:56 186:92 -0: 5 0:18 A0 8.20 .00 419 34 164 419 82 18: 0:33 -25:20:13 186:193 -0: 6 -1:19 81 8.90 .00 421 40	361 3 385	424 H 3.0L 1141.333 731 L 3.0L 243.667 295?L 3.0L 431.667
165 436 66 18: 0:33 -25:30:28 NO 247 34 166 427 87 18: 0:37 -25:31:17 NO 433 169 167 483 115 18: 0:37 -26:49:29 186189 0: 4 2:47 85 7.90 .00 422 68	130? 2 366 7 346 3	084 30.0C 69.467 140 3.0L 2380.000 484? 3.0L 1161.333
168 530 113 18: 0:39 -27:49:26 166201 -0: 5 -0:28 A0 9.20 .00 173 59 169 574 131 18: 0:44 -28:49:21 186192 0: 7 -0: 6 A0 8.20 .00 155 49 170 511 106 18: 0:45 -27:18: 1 166200 0: 3 0:24 83 9.00 .00 265 200 171 373 64 18: 0:47 -24:17: 5 186204/ -0: 1 4:43 0 5.86 .00 507 3339	108 1	051 30.00 68.367 532 30.00 51.067 354 H 30.00 578.467 841 3.00 78613.667
171 373 64 18: 0:47 -24:17: 5 186204/ -0: 1 4:43 0 5.86 .00 507 3339 172 373 64 18: 0:47 -24:17: 5 186207/ -0: 6 1:50 80 7.25 .00 507 3339 173 413 85 18: 0:56 -25:14:12 186193 0:17 4:42 81 8.90 .00 412 6 174 692 207 18: 0:57 -31:41: 5 209664 -0: 3 -2:11 83 8.99 7.81 411 42	369 235 371	
175 729 202 18: 1: 2 -32:18:32 176 822 243 18: 1: 3 -34:22:56 115 11 177 515 135 18: 1: 8 -27:38:13 186201 0:24 5:46 A0 9:20 .00 419 11	95	265? 30.0C 8.833 238? 30.0C 7.933 289 3.0L 96.333
178 665 175 18: 1: 9 -30:52:30 209669 -0:11 -0:10 89 9.60 9.34 123 31 179 699 191 18: 1:15 -31:39: 2 209664 0:14 -0: 9 83 8.09 7.81 184 85 180 506 133 18: 1:17 -27:26:50 186218 0: 3 -3:22 89 8.00 .00 417 7	90 4 384	809 30.00 26.967 741 L 30.00 158.033 1777L 3.0L 59.000
181 966 268 18: 1:28 -35:22:56 209675 -0:12 2:10 A0 8.30 8.06 120 50 182 371 72 18: 1:29 -24:19:35 186229 0: 7 3:47 8 7.21 0.0 492 1099 183 371 72 18: 1:29 -24:19:35 186229 0: 4 0:2 85 9.10 .00 492 1099 184 371 72 18: 1:29 -24:19:35 186229 0: 4 0:2 85 9.10 .00 492 1099	365 88 365 88	210 30.00 40.333 616? 3.0L 29538.667 616? 3.0L 29538.667
184 371 72 18: 1:29 -24:19:35 186227? -0:3 0:30 83 8.90 .00 492 1099 185 1:29 -27: 3:39 186241? -0:26 1:47 A2 9.00 .00 406 16 186 635 167 18: 1:32 -30:13:56 209678 -0:16 -0:4 A0 8.54 8.21 143 54 187 539 150 18: 1:33 -28:14:14 42 8.54	380	616? 3.0L 29538.667 310? 3.0L 103.333 817 30.0C 60.567 531? 3.0L 177.000
188 434 81 18: 1:39 -25:36:26 189 500 113 18: 1:40 -27: 8: 3 186241 -0:15 -2:38 A2 9.00 .00 146 28 190 516 121 18: 1:43 -27:32:38 186244 -0:21 0:46 A2 9.00 .00 136 12	115 113	224? 30.0C 7.467 677 30.0C 22.567 234?L 30.0C 7.800
191 919 294 18: 1:43 -36:34: 2 209691? -0:38 1: 1 88 7.80 .00 329 262 192 551 156 18: 1:44 -28:31:27 186234 0: 3 0:59 89 9.30 .00 426 53 193 441 108 18: 1:45 -25:59: 1 186229 0:12 2:20 A2 8.80 .00 410 15	96 23 397 1 374	N43 H 30.0C 781.433 523 H 3.0L 507.667 4337 3.0L 144.333
1994 405 92 18: 1:48 -25: 8:11 186230 0:12 4: 0 89 9.00 .00 4:11 10 195 625 188 18: 1:48 -30:14:14 209678 0: 0 -0:56 A0 8.54 8.21 404 11 196 523 147 18: 1:51 -27:54:16 197 197 197 197 197 197 197 197 197 197	376 373	2407L 3.0L 80.000 256 L 3.0L 85.333 8087 3.0L 269.333 743 3.0L 914.333
197 910 313 18: 1:54 -36:34:47 209691 -0:27 0:16 88 7.80 .00 384 69 198 69 22 126 18: 1:56 -27:41:55 186249 -0:14 0: 9 89 9.00 .00 187 99 199 628 191 18: 1:58 -30:19:42 2096787 0:10 -5:50 A0 8.54 8.21 411 48 22 20 559 141 18: 2: 1 -28:32:20 186234 0:21 0: 7 89 9.30 .00 168 60	375	086 H 30.0C 136.200 294? 3.0L 431.333 547 30.0C 84.900

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SGR	OVEREXP	RA	18:34	DEC	-30:24

OBJECT	x y	R.A.	OVEREXP RA	18:34 DEC	-30:24 A	Δ	SPEC	v	P	PEAK	NO. OF	BG	DENSITY EXP.& DEN. VOL/
NO.			occ.	NO.	R.A.	DEC.	TYPE	MAG.	MAG.	DEN.	POINTS	80	VOLUME FILTER EXP.
2012 2034 2056 2078 2096 2078 2096 2078 2096 2078 2096 2078 2097 2097 2097 2097 2097 2097 2097 2097	514 156 339 66 525 574 176 374 66 575 176 374 66 576 176 374 66 576 176 374 66 576 176 374 66 576 176 374 66 576 176 374 66 576 176 374 66 576 176 374 66 576 176 375 176 377 377	18: 2: 71 18: 2: 71 18: 2: 71 18: 2: 71 18: 2: 11 18: 2: 11 18: 2: 11 18: 2: 11 18: 2: 11 18: 2: 11 18: 2: 12 18: 2: 21 18: 2: 21 18: 2: 22 18: 2: 23 18: 2:	27 1 3 2 2 2 3 3 3 5 2 2 3 3 6 2 3 3 6 2 3 3 6 2 3 3 6 2 3 3 6 2 3 3 3 6 3 2 3 6 3 3 6 3 3 6 3 6	186295? 186295? 186297 186247 1806247 1806247 1806247 1806247 1806252 186255 186249 186255 186249 186255 186249 186255 186249 186269 186279 186269 186279 186269 186279 186269 186279 186269 186279 186289 186289 186289 186289 186289 186289 186289 186289 186289 186292 186289 186289 186289 186289 186289 186289 186289 186289 186289	519 294 288716407139568662715 2030 422 38 61 34715412675000531 532 62268	-1:81	9983 883 8928390558833888888888888888888888888888888	9.06.030 0.097 0.008 0.009 0.0	.000 .000 .000 .000 .000 .000 .000 .00	4444 4444 4472 472 472 473 473 473 473 473 473 473 473	9201689991+495193335445519446633366227991111858055568268855937492602799963110962218	371677686777884713705778847137878787878787878787878787878787878787	1117 1

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SGR	OVEREXP	RA	18.34	DEC	-30.24

OBJECT NO.	x	٧	R.A.	DEC.	SAO NO.	R.A.	DEC .	SPEC .	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	86	DENSITY EXP.8 DEN. VOL/ VOLUME FILTER EXP.
301 302 303 305 307 308 309 310 311 311 311 311 312 322 323 321 322 323 324 325 326 327 328 329 329 339 340 350 360 370 370 370 370 370 370 370 37	4707 4707	148 148 148 148 148 148 148 148 148 148	18 5 5 5 5 9 1 9 9 1 8 8 5 5 5 5 9 2 9 5 1 8 9 9 1 8 8 6 6 1 1 1 1 1 1 1 8 8 8 8 1 1 1 1	-26. 26. 19. 26. 27. 28. 28. 29. 29. 29. 29. 29. 29. 29. 29. 29. 29	186345 186357 186350 186	-0.12312491067222916611087332692291660110873320922916601108732120929166011087332092291660110873320922916601108733209229166011087332092291660110873209229166011087320922916001108732092916001108700929160011087009291600110870092916001108700929160011087009291600110870092916001108700929160011087009291600110870092916001108700929160011087009291600110870092916001108700929160011087009291600110870092916000000000000000000000000000000000	2.14 500 5910 7 66 60 59 61 3 9 8 3 50 59 61 5 7 58 5 9 2 5 5 5 7 58 5 9 2 5 5 5 9 6 5 5 7 58 5 9 2 5 5 5 9 6 5 5 7 58 5 9 2 5 5 5 9 6 5 5 7 58 5 9 2 5 5 5 9 6 5 5 7 58 5 9 2 5 5 5 9 6 5 5 7 58 5 9 2 5 5 5 9 6 5 5 7 5 8 5 9 2 5 5 5 9 6 5 5 7 5 8 5 9 2 5 5 5 9 6 5 5 7 5 8 5 9 2 5 5 5 9 6 5 5 7 5 8 5 9 2 5 5 5 9 6 5 5 7 5 8 5 9 2 5 5 5 9 6 5 5 7 5 8 5 9 2 5 5 5 9 6 5 5 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7	52 089088908080808080808080808080808080808	9.00 8.50 7.65 9.87 8.99 9.16	9.71 -C00 -000 -000 -000 -000 -000 -000 -00	1357 397 398 399 376 389 389 389 389 389 389 389 389	159311149333317864166385119793556555555555555555555555555555555555	9517337335310102 357337335310102 377337335310102 377337335310102 377337335310102 377337335310102 37733737373737373737373737373737373737	1305 30.00

SGR	OVEREXP	RA	18:34	DEC	-30:24

OBJECT NO.	x	٧	R.A.	D€C.	SAO NO.	A.A.	DEC.	SPEC.	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. B DEN. VOL./ VOLUME FILTER EXP.
0123456789901123456789901234567899012345678990123456789901234544444444444444567890112345678990012545678990125456789901254567899012545678990125456789901254567899001254567899001000000000000000000000000000000000	578769206867741550431566631356555050688415646828345616825736573056780817589532311188110885754686577999766460213244442766864779997664686477999876646864779998766468647799897664864779989766486477998976648647799897664864779989766486477998976648647799897664864779989766486477998976648647799897664864864786486478648648648648648648648648648648648648648	2511336868772 2000 2122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 2000 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 20122113776 201221137776 201221137776 20122113776 20122113776 201221113776 20122113777777777777777777	8 8 37 18 8 38 38 38 38 38 38	29:50: 29:30: 29:30: 30: 29:30: 30: 29:30: 30: 30: 30: 30: 30: 30: 30: 30: 30:	186432 186432 1209853 186432 1209853 186443 186443 186443 186443 186443 186443 186443 186443 186443 186443 186443 18645	35680332-2-8-825877-23 620239385999488 3 0 6 3012 549000 0 5 6 9 316536085 73426-54 6936599756-0022-0022-0022-0022-0022-0022-0022-00	1237339464351946435186326 22766194874545945 22 2633451221 46 3 22660722519 022311033266 922163864899627100 1335266 922163864899627100 1335266 922163864899627100 1335266 922163864899627100 13552710 1355	000082089800000098 000 89998 200090364 A B A BB BA A0090005 888 A BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	8.8991.351.00 32.0	9.42 000 000 000 000 000 000 000 000 000 0	384 384 384 387 387 387 387 387 387 387 387	1996676854772744694623533344417933345444175460961146414735998647017016756252533125288871655752046224579	350498663345425667333466835522566733396682953339688295333968835522566733396882953339688355225667333968829533396883552566733396882953339688355256873339688295333968835525687333968829533396883552568733396882953339688295333968833356883335688333568833356883335688333568833356883335688356885688	488 L 3.0L 162.667 3-966 3.0L 162.667 3-967 3.0.L 162.667 3-933 3.0.L 162.667 3-937 3.0.L 32.5667 3-937 3.0.L 32.6667 3-937 3.0.L 362.667 3-937 3.0.L 366.033 10209 3.0.L 369.567 3-937 3.0.L 369.333 10209 3.0.L 396.333 857 3.0.L 395.333 1562 3.0.L 395.333 1672 3.0.L 395.333 1572 3.0.L 395.333 1672 3.0.L 395.333 1872 3.0.L 395.333 1872 3.0.L 396.333 1872 3.0.L 396.333

	SGR OVEREXP R	18:34 DEC -30:2	4				
OBJECT X Y	R.A. DEC.	NO. R.		SPEC. V TYPE MAG.	P PEAK MAG. DEN.	NO. OF BG POINTS	DENSITY EXP. DEN. VOL / VOLUME FILTER EXP.
501 689 324 502 516 235 503 713 337 504 561 255 505 561 255 506 561 255 507 214 13 509 508 256 509 508 256 510 261 157 511 509 268 512 269 161 513 269 161 514 255 155 515 216 221 516 231 165 517 529 246 518 261 157 519 317 166 510 261 157 510 261 157 510 261 157 511 261 157 512 271 321 513 263 161 514 261 157 525 271 321 526 271 321 527 277 361 528 278 157 529 246 134 520 278 278 520 278 278 521 278 278 522 278 278 523 266 127 524 278 278 525 278 278 526 278 278 527 278 278 528 278 278 528 278 278 529 278 278 540 278 278 541 278 278 542 278 278 543 278 278 544 278 278 545 278 278 546 409 23 547 496 288 557 528 288 558 378 288 558 379 278 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 387 218 579 379 278 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579 379 379 579	1	186524 0 186513	22	89 9 9 20 8 8 9 9 10 8 9 9 9 10 8 9 9 9 9 10 8 9 9 9 9 10 8 9 9 9 10 8 9 9 9 9 10 8 9 9 9 9 10 8 9 9 9 9 10 8 9 9 9 9 10 8 9 9 9 9 10 8 9 9 9 9 9 10 8 9 9 9 9 9 10 8 9 9 9 9 9 10 8 9 9 9 9 9 10 8 9 9 9 9 9 9 10 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	8.65 352 7.89 424 .00 131 7.89 424 .00 124 .00 365 .00 376 .00 377 .00 387 .00 387 .00 388 .00 388 .00 386	7 389 324 44 43 34 34 34 34 34 34 34 34 34 34 34	1112 3.0. 57. 000 136

CCD	OVEREXP	DA	10.74	DEC	-70.24

OBJECT	×	Y	R.A.	DEC.	5A0	-30:24 A	Δ	SPEC	. v	P	PEAK	NO. OF	BG	DENSITY EXP. B DEN. VOL/
NO.				occ.	NO.	R.A.	DEC.	TYPE	MAG.	MAG.	DEN.	POINTS	90	VOLUME FILTER EXP.
6012 6003 6003 6005 6007 6007 6009 6112 615 617 617 617 617 617 617 617 617 617 617	7471888983334499913336499991337366555548499522144566555548497555288668777365788775655561733687773687773687977705999797979797979797979797979797979	3799356789922311603356951488667524999773367893678936789979979378789922368514886675247997937367899799787899799773678997997897899797899977366033776003376603377600337600033760033760033760033760033760033760033760033760033760033760033760003376000337600037600037600037600037600037600037600037600037600037600037600037600037600037600037600003760000376000037600000000	8:14:13 8:14:13 8:14:13 8:14:13 8:14:13 8:14:13 8:14:13 8:14:13 8:14:13 8:14:20 8:15:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:16:20 8:1	34: 8: 8 33: 26: 51 35: 36: 57 34: 7: 49 35: 37 34: 7: 49 31: 23: 59 23: 15: 47 23: 15: 48 23: 25: 16: 36 24: 25: 26: 36 25: 26: 36 26: 26: 26: 36 26: 26: 26: 36 27: 26: 36 28: 36: 36 28: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36: 36 38: 36 38: 36: 36 38: 36	209959 / 209951 / 209961 / 186592 / 209959 / 209951 / 186591 / 209959 / 209951 / 186591 / 209959 / 209951 / 209595 / 209555 / 209595 / 209555 / 209	11637 8 # 929862 85510 # 9280293050 5 # 8 1 2 9 7 6 # 8 # 1 5 0 5 0 5 # 8 1 2 9 7 6 7 8 # 8 # 7 2 7 9 8 # 7 1 9 8 # 7 1 7 8 # 7 2 7 9 8 # 7 1 7 8 # 7 2 7 9 8 # 7 1 7 8 # 7 2 7 9 8 # 7 1 7 8 # 7 2 7 9 8 # 7 1 7 8 # 7 2 7 9 8 # 7 2 7 9 8 # 7 2 7 9 8 # 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2 7	3458859055629 229660444655529611777865512 1932886934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546553 1955486934492 7 379166100119546693 1955486934492 7 379166100119546693 1955486934492 7 379166100119546693 19554869 19554869 19554869 19554869 19554869 1955	5089950000899 088993909888800990 8A889889900999998888900999988889980 8899000220 0 00909 9900220 0 888809929888898888	6.1002932100093661420112009931000931578899110009315788991100093157889911000931578899110009315788991100093157889911000931578899999999999999999999999999999999999	8.26 .00 .00 .00 .00 .00 .00 .00 .0	442 342 343 353 353 353 353 353 353 353	13099886611151968751388834158151288931289312815221872201415274826716999968999263115196875138883371588833715888333715888333715888333715888333715888333715888333715888333715888333715888337158883337158883337158883337158883337158883337158883337158883337158883337158883337158883371588833371588833715888337158883371588833715888337158883371588833715888337158883371588833715888337158883371588837158883715888371588837158883715888371588837158883715888371588883715888371588837158883715888837158888371588883715888837158888888888	310 3075 3015 3015 3015 3015 3015 3015 3015 301	8923 3.00 2974 333 2944 3.00 69 667 2097 3.00 69 667 2019 3.00 69 667 2019 3.00 69 567 2019 3.00 61339 733 2019 3.00 61339 733 2019 3.00 61339 733 2019 3.00 61339 733 2019 3.00 61359 733 2019 3.00 61359 733 202 3.00 67 639 203 3.00 67 639 204 3.00 67 639 207 3.00 67 639 208 3.00 67 639 209 3.00 67 639 209 3.00 67 639 209 3.00 67 639 200 200 67 639 200 200 67 639 200 200 67 639 200 200 67 639 200 200 67 200 200

			SUM	UVEREXP RA	18:34 DEC	-30:24								
OBJECT NO.	x	٧	R.A.	D€C.	5A0 NO.	A. A.	D€C.	SPEC .	MAG.	MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN. VOL/ VOLUME FILTER EXP.
710123456789901123456789901234567899012345678990123456777777777777777777777777777777777777	7761 7761	v2001282666737666280339275564567728073731486772827378667878787878787878787878787878787878	0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.16.59 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.17.51 0.18	32: 31: 33: 33: 33: 33: 33: 33: 33: 33: 33	210009 186655 210005 186655 210009 186663 210009 186663 210009 186663 210009 186663 210009 186675 210009 186677 186677 186677 186677 210026 210026 210027 210028 210038 210038 210028 210038 2100467 210046	-0:1032786152331111943166307194918111111111111111111111111111111111	-1:17-0:537-6-1:231386-6-15-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	8595988898989889090233099 49.238 0 200 8202033888990820203097 000888889 8989 9 0000009 0909	9.42029.9.999.9.8.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.909.9.9.909.	9.03 .00 .00 .00 .00 .00 .00 .00 .00 .00	3362 3310 376 376 376 376 376 376 377 376 377 377	156455555556646745796657356965735696573569666799666844422484885417778755929324899341557912 6334145881418814188147778755929324899341557912 633414598844457668844457688444888148881488814888888888888888888	294-292 3366 337 777 777 777 777 777 777 777 777	3-01 1-8-333 3-667 1391 3-01 124-3667 1391 3-01 463-667 1391 3-01 463-667 1391 3-01 463-667 1391 3-01 463-667 1391 3-01 463-667 1391 3-01 463-667 1391 3-01 463-667 1391 3-01

NRL REPORT 8173

			SGR	OVEREXP RA	18:34 DEC	-30:24								
NO.	×	Y	R.A.	D€C.	SAO NO.	R.A.	DEC.	SPEC	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP.& DEN.VOL/ VOLUME FILTER EXP.
802389991123345666669991123345666699999999999999999999999999999999	\$107 \$107 \$107 \$107 \$107 \$107 \$107 \$107	206 207 308 309 309 303 303 303 303 303 303 303 303	18:201-19:18:201	27:28:39 24:49:49 377:48:39 26:48:49 377:48:39 26:48:49 377:48:39 26:48:49	1867977 1867653 1867653 1867651 1867651 1867651 1867651 1867651 1867661 1867661 1867663 1100991/ 186786 110097 110115 1	2547766993 1037 572 871103 9355 800321131675 3 253 9542 810215 0165 266323337304 42 934223026350175 9583 01032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1032 1037 572 87120 1037	4734 438 441 133 38 182 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13	093399399 8008 0000000000000000000000000	8 9 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		103 303 303 303 303 303 305 1144 315 317 167 317 167 317 167 317 167 317 317 317 317 317 317 317 31	85+577000796692083219+6506+829+5569966-155835+12589+153524++55+3+829+93311233775362685853626859066707688138	3 8 8 5 8 9 1 7 7 9 7 7 8 9 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	192 L 30.0C 6. 400 1087L 3.0L 36.000 1087L 3.0L 36.000 1097L 3.0L 37.5667 1086 3.0L 162.000 3453 30.0C 115.100 3453 30.0C 115.100 3453 30.0C 115.100 350 3.0L 176.667 350 30.0C 4082.533 122476 30.0C 50.000 1838 30.0C 61.267 1888 30.0C 61.267 1891 30.0C 61.267 2003 H 3.0L 40.000 1838 30.0C 61.267 2003 H 30.0C 117.633 3529 H 30.0C 2.867 2753 30.0C 2.867 2765 30.0C 30.775 30.0C 30.775 30.0C 30.775 30.0C 30.775 30.0C 30.773 3

157

SCR	OVEREXP	DA	19.34	DEC	-30.24

901 634 456 18:24:51 -32:30:18 210194 -0:4 -0:10 A0 7.70 7.29 358 36 274 1444 902 674 470 18:24:51 -33:23:42 210193 -0:4 -0:50 89 8.60 8.32 330 20 282 591 903 641 438 18:24:54 -32:28:20 210194 -0:1 1:48 A0 7.70 7.29 221 98 62 6968 4 904 180 296 18:24:55 -22:23:55 186853 -0:15 2:51 A0 9.00 .00 273 6 2:5 151 4 905 280 336 18:24:57 -24:34:31 186844 -0:3 1:29 A0 8.50 .00 300 15 265 3827 906 379 372 18:24:57 -26:47:20 186843 -0:5 0:0 43 6.28 00 325 21 286 602 907 379 372 18:24:57 -26:47:20 186845 -0:5 0:4 A0 9.00 .00 325 21 286 602 908 908 925 565 18:24:59 -38:52:22 210200 -0:9 1:24 89 7.60 .00 259 14 217 383 L	3. OL 3. OL	EXP.
902 674 470 18:24:51 -33:23:42 210:193 -0: 4 -0:50 89 8.60 8.32 330 20 282 591 903 641 438 18:24:54 -32:28:20 210:194 -0: 1 1:48 40 7.70 7.29 221 98 62 6968 4 904 180 296 18:24:55 -22:23:55 186853 -0:15 2:51 40 9.00 .00 273 6 245 151:1 295 280 336 18:24:57 -24:34:31 186844 -0: 3 1: 9 40 8.50 .00 300 15 265 382:1 96 379 372 18:24:57 -26:47:20 186843 -0: 5 0: 0 43 6.28 00 325 21 286 602 907 379 372 18:24:57 -26:47:20 186845 -0: 5 0:42 40 9.00 .00 325 21 286 602 908 925 565 18:24:59 -38:52:22 210200 -0: 9 1:24 89 7.60 .00 259 14 217 383 L		481.333
912 887 321 16:25:77 -29:37:37 1669-97 0:7 1:3 AD 8:50 0:00 90 6 66 69 18:25:97 19:30 19:3	30. 0.0 1. 3. 0.0 1. 3. 0.0 1. 3. 3. 0.0 1. 3. 3. 0.0 1. 3. 3. 0.0 1. 3. 3. 3. 0.0 1. 3. 3. 3. 0.0 1. 3. 3. 3. 0.0 1. 3. 3. 3. 0.0 1. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	197.000 292.2667 200.667 127.333 200.667 127.667 127.667 128.667 239.333 108.000 108.000 108.000 128.067 241.333 774.633 774.633 774.6367 28.333 774.6367 28.333 774.6367 28.333 27.667 28.333 271.667 28.333 271.667 28.333 271.667 28.333 271.667 28.333 271.667 28.333 271.667 28.333 271.667 28.333 271.667 28.333 271.667 394.767

NRL REPORT 8173

COD	OVEREXP	DA	10.74	DEC	70.24

OBJECT NO.	x	۲	R.A.	DEC.	SAO NO.	A.A.	DEC.	SPEC.	MAG.	P MAG.	PEAK DEN.	NO. OF POINTS	80	DENSITY EXP. 8 DE	EN. VOL / EXP.
1001 1002 1003 1004 1005 1006 1007 1009 1010 1011 1011 1011 1011 1012 1022 102	24-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	384 66111 578 578 578 578 578 578 578 578	18.30	24:47:166 38:47:	1869972 102994 103997	3666666352-148864931-541292642-173106225101 9081-77 22044246 77705913786110791391441312624 212159	51.8555746330875865717185993118050551445483211250997 1444876 6001733917 721.069249894689428519661055435649720 4915703	39 ABB99999393939893939893989909909 009033 999229099 18990298892299999908822295858989898889 0099990	6.7.6.6.6.5.6.5.6.8.8.8.8.8.8.6.7.5.6.8.8.3.3.3.8.8.8.8.9.9.9.9.9.9.9.9.9.9.9	000 000 000 000 000 000 000 000 000 00	+ 055 + 344	113333300? 2213333300? 3111235533300933555888 819 3311251861488959765697656986789813123563565869811124555335635636981112455533563563686888354406531557575757	248 255 661 1527 172 254 161 272 155 61 172 275 61 172	7113 M 3.0L 213394 3.0L 4113394 3.0L 4113994 3.0L 4113394 3.0L 411394 3.0L 411	371. 000 371. 000 464. 667 464. 667 464. 667 464. 667 464. 667 13. 467 533. 333 54. 333 55. 333 567 77. 000 52. 767 44. 667 77. 000 52. 767 44. 667 77. 000 52. 767 44. 667 77. 000 52. 767 77. 000 52. 767 78. 333 79. 533 79. 533 79. 533 79. 533 79. 533 79. 533 70. 533

OBJECT NO.	×	Y	SGR R.A.	OVEREXP RA	SAO NO.	-30:24 A.A.	∆ D€C.	SPEC TYPE	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. & DEN. VOL/ VOLUME FILTER EXP.
1101 1102 1103 1104 1106 1107 1108 11108 11109 11110 1110 11100 111	41255377186999995555561519993555561529695991593565611256613556611256613569999555556152969999555556152969999555556152969999555556152969999555556152969999555556152969999555556152969999555556152969995555561529699955555615296999555561529699955556152969995555615296999555561529699955556152969995555615296999555561529699955561529699955561529699955561529699955561529699955561529699955561529699955561529699955561529699955561529699955615956159	439883334564464992688446499265559466459464595555555577456335456555757777777777777777	18.36.359	28: 0:293 28: 0:	1870897 1870897 1871090 1871000 2104102 2104507 187112 18712 18	32221361 13097435 3637 8:54151387309569 7934857777 705695105407 222 6348 8 29 26 3725 850109024957048 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 26 3725 8 501090248 8 29 20 20 20 20 20 20 20 20 20 20 20 20 20	92599997 60 326 60 95 34 4 55 95 4 4 35 95 60 60 50 50 50 50 50 50 50 50 50 50 50 50 50	940	7.9.20.90.90.12 9.9.20.90.90.12 9.9.20.90.10.10.10.10.10.10.10.10.10.10.10.10.10	000 000 000 000 000 000 000 000 000 00	100 101 103 103 103 103 103 103	470775556176002433918887703717002 823438887703717002 823438887703717002 823718887703717002 823718887703717002 823718887703717002 823718887703717002 823718887703717002 823718887703717002 823718887703717775900077 823718888770377775900777759007777887887878787878787878787878787878	88 869 855 856 860 811 856 865 865 865 865 865 865 865 865 865	1390 L 30.00

SCA	OVEREXP	DA	10.74	DEC	-30.24

				OVEREXP RA	18:34 DEC	-30:24								
NO.	X	Y	R.A.	DEC.	NO.	A. A.	DEC.	SPEC	MAG.	MAG.	DEN.	NO. OF POINTS	BG	DENSITY EXP.8 DEN.VOL/ VOLUME FILTER EXP.
1201	382 162	579 598 528	18:44:20 18:44:25 18:44:34	-27: 5:43 -28:19:46 -23:36:12	1872907 187286	-0:28 -0:3	0:21	88	8.50 7.24	.00	303 333 235	43 227 37 47	268? 272? 202	7137L 3.0L 237.667 640 3.0L 213.333 985? 3.0L 328.333 1368? 3.0L 456.000
1204 1205 1206 1207	248 390 215 327	557 582 547 585	18:44:34 18:44:35 18:44:39 18:44:45	-25:24:24 -28:20:47 -24:41:39 -27: 8:46	187286 187285? 187290	0: 6 0:11 -0: 2	-0:41 -7:24 -0:16	89 88	7.24 9.00 8.50	-00	280 134 274 360	62 76 55?	236 73 232 267?	2377 L 30.0C 79.233 2176 H 3.0L 725.333 1120 3.0L 373.333
1210 1210 1208	226 633 643 327	552 675 678 566	18:44:48 18:44:51 18:44:51 18:44:53	-24:56:37 -33:54:36 -34:7:44 -26:57:49	187301? 210583	-0:18 -0:6	-6:53 3:15	2A 2A 2A	8.60 7.06 8.50	.00	257 299 303 122	31 30 176 38	234 277? 277? 87	528 3.0L 176.000 328 3.0L 109.333 1744? 3.0L 581.333 1077 30.0C 35.900
1212	342 908 899	592 749 767	18:44:59 18:45: 9 18:45:10	-27:29:23 -39:40:45 -39:40:21	187299 210581 210581	-0: 1 0:19 0:20	-0:12 -1:12 -0:49	A0 A0	9.10 6.97 6.97	.00	313 256 329	207 220 56	2707 71 242	400 3.0L 133.333 17259 H 30.0C 575.300 2797 3.0L 932.333
1215 1216 1217 1218	543 550 209 461	653 635 553 631	18:45:11 18:45:11 18:45:19 18:45:20	-31:56:10 -31:55:18 -24:37:52 -30: 8:45	210588 210588 210591?	0: 3 0: 3	-0:53 -0:1	88 88	7.45 7.45 9.51	6.80 6.80 9.24	353 306 273 311	141 153 142 163	275? 58 222 283?	2020? 3.0L 673.333 15005 30.0C 500.167 4509? 3.0L 1503.000 530? 3.0L 176.667
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1553	463 454 454	641 642	18:46:20 18:46:22 18:46:28	-30: 3:52 -30: 3:33 -30: 3:55	210613 210613	-0:22 -0:20 -0:15	0:50	88 88	8.82	8.24 8.24 8.24	316 338	59 49 25?	62 278? 278?	2551 L 30.0C 85.033 506 3.0L 168.667 1287? 3.0L 429.000
1224 1225 1226	202 556 210	565 672 552	18:46:33 18:46:35 18:46:52	-24:33:52 -32:19:54 -24:35:29	187317 210604? 187317?	0: 6 0:23 0:25	2: 5 -2: 2 0:29	0A SA 0A	8.50 9.49 8.50	9.37 .00	274 304 106	177 37 44	208 280? 71	6448 H 3.0L 2149.333 260? 3.0L 86.667 1187 30.0C 39.567
1227 1228 1229	193 466	568 568 653	18:46:52 18:47: 1 18:47: 9	-25:41:59 -24:25:24 -30:22:22	210626	-0:21	-4:30	AO	8.73	8.36	250 297	50 10	87 213 275?	163? 30.0C 5.433 1325? 3.0L 441.667 106?L 3.0L 35.333
1530 1531	655 503 126	686 647 533	18:47: 9 18:47:27 18:47:39	-34:21:49 -31: 2: 4 -22:53:34	210625 210631 187337	-0:20 -0:18 0:5	0: 1 -0:49 -0:43	89 A0 B9	7.23 7.88 9.00	.00	200 94 84	103 5 28	65 69 57	6570 H 30.0C 219.000 118?L 30.0C 3.933 669?L 30.0C 22.300
1233 1234 1235	487 494 218	665 649 587	18:47:42 18:47:53 18:47:54	-30:52: 3 -30:51:53 -25: 0:13	210632 210632 187357	-0: 5 0: 7 -0:14	-0:43 -0:32 2:57	0A 0A SA	8.67 8.67 9.30	.00	318 86 265	327 9 35	277? 64 240?	3000?H 3.0L 1000.000 184 L 30.0C 6.133 361? 3.0L 120.333
1236	187 510	577 675	18:47:58 18:47:58	-24:21:28 -31:24:39	187355	-0: 7	5:22	89	8.70	.00	242 312 297	267	212	528? 3.0L 176.000 3262? 3.0L 1087.333
1238 1239 1240	299 490 325 478	615 672 608 653	18:48: 7 18:48:10 18:48:31 18:48:36	-26:45:34 -30:57:49 -27:11: 3	187359 210631? 187374	-0: 5 0:26 -0:18	1:26 3:26 0:53	A2 A0 B5	9.10 7.88 9.30	.00	316 150 87	171 25	260 280? 75? 62	177 3.0L 59.000 1940? 3.0L 646.667 1712 L 30.0C 57.067 91? 30.0C 3.033
1241 1242 1243	72 273	528 615	18:48:37	-30:33:34 -21:50:33 -26:15:30	187369 NO	-0: 5	4:34	AO	8.80	.00	334	20?	56 280?	93?L 30.0C 3.100 2737 3.0L 912.333
1244 1245 1246	738 268 271	752 617 619	18:48:54 18:49: 5 18:49:11	-36:28:53 -26:10:12 -26:14:31	NO NO NO	0:13	0:15	SA	9.36	9.44	286 325 351	139 1099	258? 277? 276?	360? 3.0L 120.000 2633 3.0L 877.667 6857 3.0L 2285.667
1247 1248 1249	487 479 440	662 681 671	18:49:12 18:49:18 18:49:21	-30:47:39 -30:48:54 -29:56:36	210663 210663 210656	-0:17 -0:12 : 9	0: 5 -1:10 3:55	88 A0	6.63 6.63 9.67	.00	338 413 305	169 300? 93	64 276? 274?	18917 30.00 630.567 28616 H 3.0L 9538.667 1577? 3.0L 525.667
1250 1251 1252	601 167 502	717 590 691	18:49:30 18:49:36 18:49:36	-33:30:59 -24: 3:26 -31:20:15	187384	0:50	0:32	89	9.30	.00	312 245 314	290 207 331	276? 215? 284?	3694? 3.0L 1231.333 1178 H 3.0L 392.667 2295? 3.0L 765.000
1253	573 201 775	711 588	18:49:37	-32:54:42	2106732	-0:12 -0: 9	-9:16 0:21 -1:10	A0 89 A0	10.50 8.50 7.04	10.03	305	105	276? 68 259?	989?H 3.0L 329.667 2526 30.0C 84.200
1255 1256 1257	186	778 605 696	18:50:14 18:50:21 18:50:22	-37:21:20 -24:31: 5 -31: 4:41	210676 1874087 2106847	0:13	7:39 6:26	89 A5	8.50 9.82	9.78	310 239	107 12 274	209 287?	295 L 3.0L 98.333 7112H 3.0L 270.333
1258 1259 1260	791 101	714 763 566	18:50:32 18:50:35 18:51: 0	-33:49:29 -37:20:22 -22:37:36	210692 210676? 187425	-0: 7 0:33 -0: 7	-0:40 -0:12 0:25	A0 A0 BB	9.88 7.04 8.00	9.16	136 129	77 119	66 72 56	1567 30.00 5.200 3102 30.00 103.400 5008 30.00 166.933
1263 1263	206 92 473	601 585 681	18:51: 6 18:51: 9 18:51: 9	-24:48:36 -22:36:44 -30:37:50	187431 187425 210701	-0:13 0:2 -0:7	1:21	88 88	7.50 8.00	.00 .00 9.68	263	179 42	73 182 66	12741 30.00 424.700 1205 3.0L 401.667 278? 30.00 9.267
1265	499	688 699	18:51:12	-31:12: 7 -30:33:53	210704	-0:14 -0:1	-0:34 4:55	AO AO	8.54	9.68	316	108 768	67 2867	7536 H 30.0C 251.200 2471?H 3.0L 827.000
1266 1267 1268	90 521 196	706 696 621	18:51:15 18:51:22 18:51:23	-31:10:35 -31:41:32 -24:48:20	210704 210700 187431	-0:12 0: 7 0: 6	0:57 0:9 1:37	89 88	8.54 9.29 7.50	8.00 8.64	377 127 351	20007 57 71	2807 67 237?	2284 30.00 76.133 1966? 3.0L 655.333
1269 1270 1271	221 276 537	633 633 707	19:51:42 13:51:56 18:51:59	-25:20:37 -26:21:39 -32: 4:42	187441 187448 210720	0: 2 -0:14 -0:20	0:46 -0:1 0:36	83 89	9.00 2.14 8.87	.00	270 484 104	6302 36	255? 93 66	597L 3.0L 19.667 849817 30.0C 28327.233 1069 L 30.0C 35.633
1272	529 266	726 655	18:52:4	-32: 5:55 -26:20:28	210720	0:12	-0:37 1:10	89 83	8.87	9.43	326 511 312	1374 9000? 331	284? 273? 281?	726 3.0L 242.000 367978 3.0L122659.333 2370? 3.0L 790.000
1274 1275 1276	471 123 839	719 597 829	18:52:46 18:52:59 18:53: 1	-30 52:33 -23:13:52 -38:54:0	187468 210737?	-0:0	0:29	88 89	5.89 8.56	.00	389 277	344 10?	261?	41687 30.0C 1389.567 1937L 3.0L 64.333
1277 1278 1279	565 114 701	747 615 787	18:53: 4 18:53: 7 18:53:12	-32:57:52 -23:12:60 -35:56:43	187468 210730	0: B 0:13	1:21	88	5.89 8.90	.00 8.55	308 407 314	153 16	278? 190 278	10087 3.0L 3362.333 435 3.0L 145.000
1585 1581 1580	708 592 767	770 738 812	18:53:19 18:53:24 18:53:37	-35:56:15 -33:24:16 -37:24:42	210730 210749 210734	0:20 -0:16 0:20	0: 1 -0:31 -0: 9	89 89 85	8.90 7.16 5.41	8.55 .00 .00	106 259 461	113 276	70 70 276	1131 30.0C 37.700 9467 L 30.0C 315.567 24930 3.0L 8310.000
1583	583 842	758 817	18:53:38	-33:23:22 -38:50: 6	210749 210737 210734?	-0: 2 0:18 0:06	0:24 -2:55 -0:55	89 89 85	7.16 8.56 5.41	9.27	370 98 409	2000? 18 583	275? 72 77	18409 H 3.0L 6136.333 407?L 30.0C 13.567 77456 30.0C 2581.867
1295 1296 1287	776 153 402	795 635 696	18:53:43 18:53:45 18:54:14	-37:25:28 -24: 4:32 -29:16:13	187482 NO	0: 6	-0:25	SA	9.10	.00	230	21	196	533?H 3.0L 177.667 577 30.0C 19.233
1299 1299	379 109 370	696 635 715	18:54:43 18:54:52 18:54:52	-28:47:59 -23:14:48 -28:46:54	187511 187499 187511	-0:21 0:17 -0:13	1:14	89 89	8.68 9.30 8.68	.00	152 203 353	72 7 1979	78 179 274?	3413 30.0C 113.767 1577 3.0L 52.333 22279 H 3.0L 7426.333
1292 1293	515 658 658	764 764 670	18:54:57 18:54:57 18:55: 4	-34:16:29 -34:16:29 -25:24:40	210769/ 210776/ 187508	0: 2 -0:13 0:14	3:46 0:28 3:27	89 89 45	8.96 7.17 9.30	8.57 .00	241 241 257	121	71 71 234	9215 30.00 307.167 9215 30.00 307.167 119? 3.0L 39.667
1294	849 656	834 774	18:55: 6 18:55: 9	-39: 3:31 -34:54:50	210764	0:19	-2:23 -0:36	A0 A0 B9	8.94 8.29 8.96	8.63 8.12 8.57	104	38 32	72 72 888	1111 30.0C 37.033 1072 L 30.0C 35.733 1371 3.0L 457.000
1296 1297 1298	619 619 292	784 784 697	18:55:10 18:55:10 18:55:17	-34:16:45 -34:16:45 -27: 6:48	210769? 210776 187513	0:14 -0: 0 0: 6	3:30 0:12 -1:10	89 89	7.17	.00	362 362 304	32 15	288	1371 3.0L 457.000 60?L 3.0L 20.000
1300	547 187	767 665	18:55:17 18:55:18	-32:42: 5 -24:54:30	210774?	0: 7	2:12	A5 A0	9.96 6.60	9.77	310	303 72	281?	1803?H 3.0L 601.000 2648 3.0L 882.667

902	OVEREXP	DA	19.7	4 DEC	- 30 - 24

1502 155 605 100 505	1302 195 650 18-55:34 -24:54 1875:17 0:17 2:19 A0 6:60 0:00 2:49 3:4 3:733 2:02? 3:0.00 1304 206 658 18:55:55 -25:9:59 187532 0:3 2:10 88 8:40 0:0 31:2 32 2:88 1340 3:0.00 1305 137 675 18:55:57 -26:25:6 187532 0:3 2:10 88 8:40 0:0 31:2 32 2:88 1340 3:0.00 1305 3:0.00 3:	DEN. VOL	DENSITY EXP. & VOLUME FILTER	BG	NO. OF POINTS	PEAK DEN.	P MAG.	MAG.	SPEC	DEC.	A.A.	SAO NO.	DEC.	R.A.	Y	x	OBJECT NO.
1396 456 456 19: 5:14 -31:23:43 210977 -0:11 0:1 89 8.73 8.30 322 12 287 322 322 322 322 322 322 322 322 322 32	1399 691 693 18:59:35 -35:33:39 NO	## ExP. 76.86 354.73 67.33 68.73 67.33 68.73 68.73 69	VOLUME FILTER	51137 28897 7137 28897 72881 28599 72881 28599 72899 7	POINT 13755 + 8645 5 + 8 13 15 16 16 16 16 16 16 16 16 16 16 16 16 16	0EN. 999 2394 1912 234 234 234 234 234 234 234 234 234 23	MAG	6.6.9.9.4.0.0 087.	PP 203888 08802 500008820 888883 0020003030322033030 800 800 800 800 800 800 800 800 8	C. 493104 3955169 313332121223 3073-04 9255694-0004 315522 315522 315522 315551 315522 315522 315551 315522	R.A. 6:7935 4:5521 3:656551 7:537834651 4:5526 8:8726 6:5956 8:33663 8:5917 8:092 8:5526 8:33663 8:5917 8:092 8:5526 8:55	NO. 187519 187517 187522 187532 187532 187532 187532 187532 187532 187532 187532 187532 187532 187536 187536 187552 187563 187569	-22: 32: 29 -24: 54: 23 -27: 59: 59: 59 -26: 16: 20 -27: 59: 59: 56 -26: 16: 20 -27: 59: 59: 60 -27: 22: 32: 22: 33 -28: 28: 29: 33 -28: 28: 28: 33 -28: 28: 28: 33 -28: 28: 28: 33 -28: 28: 28: 33 -28: 28: 38: 28: 38 -28: 28: 38: 28: 38 -28: 28: 38: 38: 38: 38: 38: 38: 38: 38: 38: 3	18:55:35 18:55:35 18:55:35 18:55:35 18:55:35 18:55:35 18:55:35 18:56:10 18:	6150 6751 675 675 675 675 675 675 675 675 675 675	825 205 205 205 205 205 205 205 205 205 2	NO. 1303 1304 1303 1304 1306 1307 1308 1310 1311 1311 1311 1311 1311 1311

NRL REPORT 8173

CCD	OVEREXP	D.	10.7	ne ne	- 70	- 24
SUR	UVEREXP	MA	18:3	W DE	- 50	154

OBJECT NO.	x	Y	R.A.	DEC.	SAO NO.	A.A.	Δ DEC.	SPEC. TYPE	WAG.	P MAG.	PEAK DEN.	NO. OF POINTS	BG	DENSITY EXP. 8 VOLUME FILTER	DEN. VOL /
1401	430	835	19: 5:46	-30:40:29	210987	-0:10	1:55	AO	7.89	.00	120	47	77	1447 L 30.00	48.233
1402	158	782 765	19: 5:55 19: 5:55	-25: 4:2B -25: 4:24	187728?	0:12	5: 7	89	6.76	.00	359	116	201	6835 3.0L 19325 30.0C	2278.333
1404	489	854	19: 6: 3	-31:58:58	211001	-0:56	1:11	85	9.52	8.91	189	115	78	6374 30.0C	212.467
1405	550	804	19: 6:15	-26:23:52	187758?	-0:34	4:34	85	9.00	8.91	362	200?	5803	101 L 3.0L 7876 H 3.0L	33.667 2625.333
1405	478	861	19: 6:17	-31:56:50 -30:45: 7	211001	0:32	3:18	AO	7.89	.00	305	9	274	216 L 3.0L	72.000
1408	604	907	19: 6:35	-34:42:41	210998	0:13	3: 9	A.0	8.21	7.89	314	17	286	420 L 3.0L	46.667
1409	615	812	19: 6:42	-26:35:43 -34:46: 6	210998	0:55	-0:17	AO AO	8.50	7.89	261	40	234	1407L 3.0L 1093 L 30.0C	36.433
1411	685	909	19: 6:46	-36:17:16	210996?	0:30	-2:30	89	6.58	.00	297	179	77	16760 30.0C	558.667
1412	499 675	986	19: 6:54	-32:27:10 -36:16: 9	211004?	0:21	-7: 2	89	8.93 6.58	8.84	312	48	386	1187 3.0L 1519 L 3.0L	39.333 506.333
1414	419	876	19: 7:50	-30:46:54	211019	0:43	-1:39	A5	10.10	9.76	308	10?	283?	1207H 3.0L	40.000
1415	419	876	19: 7:50	-30:46:54	5110563	-0:50	-3:51	A 3	9.71	9.53	308	10?	283?	1207H 3.0L 614 3.0L	204.667
1416	192	815	19: 7:54 19: 7:55	-25:56:17 -27: 8:11	187776	0: 2	1:25	89 A0	8.50	.00	252	56	225	438? 3.0L	146.000
1418	370	845	19: 8: 4	-29:31:45	187786	-0:5	3:23	89	6.25	.00	378	218	76?	28544 30.00	951.467
1419	199	800	19: 8: 7 19: 8: 8	-25:54:27 -26:50:58	187776 NO	0:15	5:12	89	8.50	-00	119	85 25	67 243?	2951 30.0C	98.367 148.333
1420	234 361	866	19: 8:14	-29:33:24	187786	0:5	1:44	89	6.25	.00	370	556	277?	9393 3.OL	3131.000
1422	273	846	19: 8:32	-27:42:25	NO				8.60	.00	293	3	259	255 3.0L 1917L 3.0L	85.000 63.667
1423	242	838	19: 8:35	-27: 2:47 -33:46:58	187792?	0:10	6:49 8:54	AO AO	7.30	.00	317	4	294	86?L 3.0L	28.667
1425	267	851	19: 9: 7	-27:36:41	NO						287	4	265	86 3.0L	28.667
1426	667 660	935 954	19: 9:38	-36: 4:57 -36: 7:11	211039	0:39	7:26	85 SA	8.95	9.62	138	93	77?	3787 30.0C	126.233
1428	371	865	19: 9:40	-29:40:47	187830	-0:17	2:35	89	8.10	.00	143	78	75?	4044 30.0C	134.800
1429	568	911	19: 9:40	-33:55:42	211045/	0:13	0:31	AO	7.86	.00	375 375	214	77?	27189 H 30.0C 27189 H 30.0C	906.300 906.300
1430	568 558	911	19: 9:40	-33:55:42	211046/	0:50	0:10	AO AO	7.86	.00	419	105	303	5940 H 3.0L	1980.000
1432	558	930	19: 9:47	-33:54:24	211046/	0:20	1:28	AO	7.30	.00	419	105	303	5940 H 3.0L	1980.000
1433	431	881 881	19: 9:48	-30:58:31 -30:58:31	211054/	-0:13 -0:14	2:15	AO AO	9.07	9.01	110	25	75? 75?	720 30.0C	24.000
1435	255	859	19:10: 4	-27:27: 0	21103						588	67	255	1408? 3.0L	469.333
1436	359	886	19:10: 5	-29:39:23	187830	0: 7	3:59 6: 9	89 A0	9.39	8.97	307 308	24	272	469 L 3.0L	156.333 38.667
1437	456 273	910 868	19:10: 8	-31:44:22	211066?	0:16	6:51	A5	9.39	.00	284	55	273?	429?H 3.0L	143.000
1439	422	906	19:10:30	-31: 3: 4	211054?	0:29	-2:18	AO	9.07	8.71	310	4	285	89?L 3.0L	29.667
1440	422	906 906	19:10:30 19:10:30	-31: 3: 4	211057?	0:28	-2:25 -3:48	AO AO	8.80	9.01	310	4	285	89?L 3.0L 89? 3.0L	29.667 29.667
1442	176	823	19:10:37	-25:36:12	187841	0:20	0:59	AD	9.10	.00	100	4	65	126?L 30.0C	4.200
1443	251	868 871	19:10:58	-27:24:52 -28:49: 5	187861?	-0:25 -0:16	3: 6	A0 88	9.50	.00	124	36 60	253? 75?	775? 3.0L 2203 30.0C	258.333 73.433
1444	325	889	19:11:12	-28:46:51	187864?	-0:8	5: 8	88	9.20	.00	307	8	276	210 L 3.0L	70.000
1446	257	855	19:11:24	-27:22:27	187861?	0: 1	5:31	AO	8.50	.00	291	61	73? 260?	2024 30.0C 1061? 3.0L	67.467 353.667
1447	432	902	19:11:29	-27:22:44 -31: 8:16	187861?	0: 6	5:14	AD AD	8.94	8.47	109	53	75?	870 30.0C	29.000
1449	250	877	19:11:47	-27:27:34	187861?	0:24	0:25	AO	8.50	.00	595	51	257?	1028? 3.0L	342.667
1450	255	879 889	19:11:51	-27:34:12 -27:52:36	187861?	-0:10	-6:14	AO AO	9.50	.00	598	30	269	104?L 3.0L 766? 3.0L	34.667 255.333
1451	267 605	952	19:12:32	-34:55: 9	NO						533	150	80?	11364 30.00	378.800
1453	277	876	19:12:45	-27:53:49	187884	0:13	2:52	A D	9.00	.00	104	7 38	75?	1857L 30.0C	6.167
1454	597	972 896	19:12:46	-34:57:58 -28: 6:46	NO 187891	-0: 7	-4:34	SA	9.20	.00	301	14	275	343? 3.OL	114.333
1456	545	943	19:12:58	-33:38:18	211100/	0.57	-1:10	A O	7.38	.00	347	755	80?	26247 30.0C 26247 30.0C	874.900 874.900
1457	545 535	943	19:12:58	-33:38:18 -33:38:12	211101/	0:24	1:50	88 A0	9.03	8.38	347	227 85	305	26247 30.0C 4980 H 3.0L	1660.000
1459	535	962	19:13: 3	-33:38:12	211101/	0:29	1:55	88	9.03	8.38	402	85	302	4980 H 3.0L	1660.000
1460	510 586	961 957	19:13:23	-33: 8:29 -34:33:26	511113	0:14	-1:21	OA OA	8.86 8.98	8.55 8.58	319	10	292	234? 3.0L 1855 30.0C	78.000 61.833
1462	484	961	19:13:58	-32:36:36	211132?	-0:25	-1:14	AO	8.84	8.63	318	13	284	356? 3.0L	118.667
1463	599	918	19:14:13	-28:41:58 -30:55:52	187922?	-0:7 -0:29	-7:59 -0:40	A5 A0	9.20	.00 8.81	303 305	7	274	169? 3.0L 87?L 3.0L	56.333
1464	509	950 983	19:14:53	-30:55:52	2111557	0:16	-0:40	88	7.52	.00	396	111	274	6756 H 3.0L	2252.000
1466	518	966	19:15:32	-33:13:36	211148	0:25	1: 2	88	7.52	8.81	362 317	224 61	88	24884 30.0C 1552 3.0L	829.467 517.333
1467	396 459	957 979	19:15:38	-30:51:44 -32:15:51	211155	0:16 -0:30	3:28 5:14	OA OA	9.74	9.43	321	14	277	3937 3.0L	131.000
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